



1
00:01:56,359 --> 00:01:51,859
good evening how is everybody doing what

2
00:01:58,399 --> 00:01:56,369
an amazing week right well it's about to

3
00:02:02,120 --> 00:01:58,409
get a whole lot better tonight rizz

4
00:02:04,219 --> 00:02:02,130
Burke is here and doesn't get any better

5
00:02:06,050 --> 00:02:04,229
than rizz and you know with David

6
00:02:08,389 --> 00:02:06,060
Wilcock and Nic right for Nick Redfern

7
00:02:10,009 --> 00:02:08,399
last night Slender Man that was really

8
00:02:14,000 --> 00:02:10,019
really good

9
00:02:16,699 --> 00:02:14,010
but rizz Burke is somebody that you need

10
00:02:19,880 --> 00:02:16,709
to pay attention to he's about as smart

11
00:02:25,720 --> 00:02:19,890
as they come and he's one of the leaders

12
00:02:32,300 --> 00:02:25,730
of not only the internet but blockchain

13
00:02:34,640 --> 00:02:32,310

futurism and ever you need to stop and

14

00:02:37,490 --> 00:02:34,650

listen to his work he's just a very very

15

00:02:39,259 --> 00:02:37,500

bright guy and very cool and he's a fade

16

00:02:41,449 --> 00:02:39,269

or not so it doesn't get any better

17

00:02:44,150 --> 00:02:41,459

right so get ready here we are we're

18

00:02:47,089 --> 00:02:44,160

live I've got I've got eight seconds

19

00:03:02,210 --> 00:02:47,099

I've got five seconds here we go

20

00:03:17,190 --> 00:03:10,460

[Music]

21

00:03:20,880 --> 00:03:17,200

this hope radio for the masses Atlanta

22

00:03:23,070 --> 00:03:20,890

between July 8 1947 the Army Air Force

23

00:03:24,930 --> 00:03:23,080

has announced on applying this has been

24

00:03:27,870 --> 00:03:24,940

found and is now in the possession of

25

00:03:31,920 --> 00:03:27,880

the army the game is rigged changed the

26

00:03:35,160 --> 00:03:31,930

game changer I occasionally think how

27

00:03:38,940 --> 00:03:35,170

quickly our differences worldwide would

28

00:03:41,390 --> 00:03:38,950

vanish if we were facing an alien threat

29

00:03:43,740 --> 00:03:41,400

from outside his way

30

00:03:45,830 --> 00:03:43,750

[Music]

31

00:03:48,530 --> 00:03:45,840

[Applause]

32

00:03:51,500 --> 00:03:48,540

this is fade to black with your host

33

00:03:55,210 --> 00:03:51,510

Jimmy Church on the game changer radio

34

00:03:58,590 --> 00:03:55,220

network and K GRA

35

00:04:03,690 --> 00:04:00,450

I need your help to get to the year

36

00:04:03,700 --> 00:04:07,370

[Music]

37

00:04:11,530 --> 00:04:09,339

you listening today too

38

00:04:12,590 --> 00:04:11,540

with jimmy touch on the game changing

39

00:04:17,739 --> 00:04:12,600

Ned Ludd

40

00:04:22,119 --> 00:04:17,749

[Music]

41

00:04:37,429 --> 00:04:22,129

good evening fade to black the spoke

42

00:04:43,790 --> 00:04:37,439

radio for the masses man do I love my

43

00:04:45,429 --> 00:04:43,800

job today is Wednesday May 16 2018 135

44

00:04:51,649 --> 00:04:45,439

days into the new year

45

00:04:54,320 --> 00:04:51,659

just 230 days left we are live from a

46

00:04:56,420 --> 00:04:54,330

bunker somewhere in beautiful downtown

47

00:04:58,490 --> 00:04:56,430

Burbank California and I would like to

48

00:05:02,330 --> 00:04:58,500

welcome everybody listening all around

49

00:05:05,959 --> 00:05:02,340

the world and all across the United

50

00:05:08,600 --> 00:05:05,969

States hither and tiddler to and fro

51
00:05:13,690 --> 00:05:08,610
back and forth up and down east and west

52
00:05:16,570 --> 00:05:13,700
north and south far and near

53
00:05:19,660 --> 00:05:16,580
this is fade to black for kjc are the

54
00:05:21,120 --> 00:05:19,670
game changer network and kg are a the

55
00:05:24,550 --> 00:05:21,130
planets

56
00:05:28,330 --> 00:05:24,560
I'm your Jimmy Church what is cracking

57
00:05:32,260 --> 00:05:28,340
everybody how you doing right before the

58
00:05:36,430 --> 00:05:32,270
show tonight I hope he's listening right

59
00:05:41,470 --> 00:05:36,440
before the show I get I get a text I get

60
00:05:44,800 --> 00:05:41,480
a text from race Hobbs and look where

61
00:05:48,100 --> 00:05:44,810
race is he's at in-and-out burger in

62
00:05:50,950 --> 00:05:48,110
Salt Lake City though they had been

63
00:05:59,020 --> 00:05:50,960

announced all Exedy but but is his reply

64

00:06:01,540 --> 00:05:59,030

was off the bleeping chain awesome good

65

00:06:05,260 --> 00:06:01,550

pretty who raised if you've never had

66

00:06:08,200 --> 00:06:05,270

in-n-out burger before the first time

67

00:06:10,570 --> 00:06:08,210

you've had it and and I've witnessed it

68

00:06:14,080 --> 00:06:10,580

so many times and as some guest comes in

69

00:06:15,220 --> 00:06:14,090

from out of town pick him up at LAX and

70

00:06:17,350 --> 00:06:15,230

you're pulling out there's in-and-out

71

00:06:20,820 --> 00:06:17,360

burger right there man he's just pull

72

00:06:23,890 --> 00:06:20,830

right in and watch their face there's

73

00:06:28,120 --> 00:06:23,900

nothing like it because you've never

74

00:06:29,410 --> 00:06:28,130

experienced it it is truly and I'm just

75

00:06:31,030 --> 00:06:29,420

so thankful we have them here in

76

00:06:32,920 --> 00:06:31,040

Southern California it is truly the best

77

00:06:34,870 --> 00:06:32,930

hamburger in in the United States

78

00:06:36,580 --> 00:06:34,880

there's and there's good stuff out there

79

00:06:39,670 --> 00:06:36,590

everybody's proud of their burgers and I

80

00:06:44,200 --> 00:06:39,680

get that but there is nothing like an

81

00:06:46,540 --> 00:06:44,210

in-and-out burger fries and and they're

82

00:06:49,150 --> 00:06:46,550

fine it's so weird once they drop in

83

00:06:52,210 --> 00:06:49,160

temperature they go cold they're

84

00:06:54,550 --> 00:06:52,220

inedible but but when they're hot and

85

00:06:57,010 --> 00:06:54,560

they always are but when they're hot you

86

00:06:59,110 --> 00:06:57,020

got to eat them then and that in and out

87

00:07:02,380 --> 00:06:59,120

chocolate shake that's it man that's

88

00:07:04,950 --> 00:07:02,390

where it's at I just wanted to share

89

00:07:09,970 --> 00:07:04,960

that with you guys it really made my day

90

00:07:13,120 --> 00:07:09,980

tonight's very special guests back with

91

00:07:15,390 --> 00:07:13,130

this R is Burke is here we're gonna talk

92

00:07:18,580 --> 00:07:15,400

about killer AI because he's written an

93

00:07:21,640 --> 00:07:18,590

amazing article over at hacker noon

94

00:07:25,060 --> 00:07:21,650

dot-com I posted it over at on stellar

95

00:07:26,650 --> 00:07:25,070

today the link to it and it's called the

96

00:07:31,170 --> 00:07:26,660

road to killer a

97

00:07:34,960 --> 00:07:31,180

ml + blockchain + io t + drones equals

98

00:07:36,960 --> 00:07:34,970

Skynet it's a frightening article it's a

99

00:07:40,690 --> 00:07:36,970

great article and we're gonna discuss

100

00:07:41,830 --> 00:07:40,700

all of that tonight with rizz tomorrow's

101
00:07:43,330 --> 00:07:41,840
another failure tonight with Jon

102
00:07:46,450 --> 00:07:43,340
Rappoport and there's no more fake

103
00:07:51,160 --> 00:07:46,460
newsroom live followed by open lines all

104
00:07:54,160 --> 00:07:51,170
night long and now I'm gonna see it's

105
00:07:54,520 --> 00:07:54,170
possible if we can take some phone calls

106
00:07:57,520 --> 00:07:54,530
tonight

107
00:08:00,880 --> 00:07:57,530
Riz is on the east coast so it'll be

108
00:08:02,680 --> 00:08:00,890
getting late for him but nonetheless I

109
00:08:05,620 --> 00:08:02,690
will see if we can squeeze in some phone

110
00:08:10,330 --> 00:08:05,630
calls tonight for rizz Burke follow us

111
00:08:13,060 --> 00:08:10,340
on Twitter at J Radio Facebook is still

112
00:08:14,290 --> 00:08:13,070
alive for the time being and YouTube you

113
00:08:15,940 --> 00:08:14,300

can still subscribe over there

114

00:08:17,650 --> 00:08:15,950

everything is fade to black teacher at

115

00:08:20,470 --> 00:08:17,660

Radio Jupiter's radio fade to black blah

116

00:08:24,300 --> 00:08:20,480

blah blah go now you can follow like and

117

00:08:30,580 --> 00:08:24,310

subscribe the sandbox on Twitter is

118

00:08:34,450 --> 00:08:30,590

hashtag F to be F the number two and a B

119

00:08:38,650 --> 00:08:34,460

F to be on Twitter and I say it every

120

00:08:44,569 --> 00:08:38,660

night we don't bite Salt Lake City got

121

00:08:50,579 --> 00:08:48,840

apparently that is the case unless race

122

00:08:53,939 --> 00:08:50,589

is somewhere here in Southern California

123

00:08:56,639 --> 00:08:53,949

they opened up after the founders have

124

00:08:59,840 --> 00:08:56,649

in and out after the dad passed away the

125

00:09:02,850 --> 00:08:59,850

kids you know lost control with

126

00:09:05,100 --> 00:09:02,860

in-and-out burger and one of them

127

00:09:10,500 --> 00:09:05,110

started to sell franchises so they

128

00:09:12,090 --> 00:09:10,510

leaked into Vegas Arizona I think they

129

00:09:16,500 --> 00:09:12,100

may have even gotten into New Mexico

130

00:09:21,870 --> 00:09:16,510

parts of Texas Oregon and they spread

131

00:09:24,500 --> 00:09:21,880

out and then a judge intervened and shut

132

00:09:26,579 --> 00:09:24,510

down that one sibling I do believe and

133

00:09:28,019 --> 00:09:26,589

yeah I don't know what happened to those

134

00:09:30,810 --> 00:09:28,029

franchises though I don't know if they

135

00:09:33,600 --> 00:09:30,820

shut them down but there was reasons for

136

00:09:35,340 --> 00:09:33,610

that because all of the in-n-out burgers

137

00:09:39,060 --> 00:09:35,350

here in Southern California they locally

138

00:09:42,840 --> 00:09:39,070

source everything fresh from local

139

00:09:45,120 --> 00:09:42,850

farmers so that was in Ranchers and that

140

00:09:49,290 --> 00:09:45,130

was the secret to their success and they

141

00:09:51,360 --> 00:09:49,300

didn't want to let go of that and there

142

00:09:54,150 --> 00:09:51,370

is other issues involved - you know

143

00:09:55,740 --> 00:09:54,160

sibling rivalry but but there you go I

144

00:09:58,139 --> 00:09:55,750

guess someone opened up there in Salt

145

00:10:00,269 --> 00:09:58,149

Lake so okay maybe they're franchising

146

00:10:01,889 --> 00:10:00,279

again haven't heard of anything about

147

00:10:04,170 --> 00:10:01,899

that any questions or comments during

148

00:10:07,590 --> 00:10:04,180

the show tonight you can use hashtag F

149

00:10:10,259 --> 00:10:07,600

to be cute now see I'm reading the post

150

00:10:12,090 --> 00:10:10,269

in Twitter as they are coming in and as

151

00:10:13,410 --> 00:10:12,100

soon and that's what I just did so if

152

00:10:17,129 --> 00:10:13,420

you want to come and check out all of

153

00:10:19,050 --> 00:10:17,139

that hashtag F to B and then hashtag F

154

00:10:21,569 --> 00:10:19,060

to be Q for questions

155

00:10:24,540 --> 00:10:21,579

I keep Twitter live during the show and

156

00:10:27,569 --> 00:10:24,550

the chat rooms - are live in front of me

157

00:10:29,280 --> 00:10:27,579

so good evening everybody and and any

158

00:10:32,540 --> 00:10:29,290

questions comments just just post

159

00:10:40,310 --> 00:10:35,600

it happened today let me get to some

160

00:10:43,940 --> 00:10:40,320

breaking news happened today the Senate

161

00:10:47,120 --> 00:10:43,950

voted to pass a measure that would

162

00:10:48,980 --> 00:10:47,130

repeal changes to net neutrality rules

163

00:10:50,840 --> 00:10:48,990

that were recently adopted by the

164

00:10:54,530 --> 00:10:50,850

republican-controlled Federal

165

00:10:56,810 --> 00:10:54,540

Communications Commission now the

166

00:10:59,210 --> 00:10:56,820

measure which was backed by all 49

167

00:11:00,079 --> 00:10:59,220

Democrats and Republican senators Susan

168

00:11:03,829 --> 00:11:00,089

Collins

169

00:11:08,810 --> 00:11:03,839

Lisa Murkowski John Kennedy of Louisiana

170

00:11:10,160 --> 00:11:08,820

it will now be sent to the house and I

171

00:11:12,410 --> 00:11:10,170

don't know where it's gonna go from

172

00:11:16,130 --> 00:11:12,420

there okay I don't know

173

00:11:18,380 --> 00:11:16,140

let's hope ok this was I didn't think it

174

00:11:21,230 --> 00:11:18,390

was gonna pass the Senate I thought it

175

00:11:24,800 --> 00:11:21,240

was gonna be a very bleak day today but

176

00:11:27,430 --> 00:11:24,810

it made it through I don't know what

177

00:11:31,460 --> 00:11:27,440

Trump's gonna do with it president Trump

178

00:11:36,010 --> 00:11:31,470

believes in in business and I would

179

00:11:40,610 --> 00:11:36,020

think that I would think that he would

180

00:11:42,170 --> 00:11:40,620

go ahead and and do what the Senate and

181

00:11:47,949 --> 00:11:42,180

the house want to do with this but the

182

00:11:50,660 --> 00:11:47,959

people that that put him in office they

183

00:11:53,930 --> 00:11:50,670

they do not want to lose control of

184

00:11:57,139 --> 00:11:53,940

their internet and and I'm being serious

185

00:11:59,000 --> 00:11:57,149

about that all right all those everybody

186

00:12:01,639 --> 00:11:59,010

all those constituents have been in the

187

00:12:09,310 --> 00:12:01,649

White House they're not gonna want their

188

00:12:13,490 --> 00:12:09,320

Netflix throttled back by NBC so just oh

189

00:12:14,870 --> 00:12:13,500

man ok so anyway I was relieved I don't

190

00:12:17,150 --> 00:12:14,880

know what the house is gonna do though I

191

00:12:19,579 --> 00:12:17,160

really don't and even if the House

192

00:12:23,990 --> 00:12:19,589

passes it you know Trump can still veto

193

00:12:25,460 --> 00:12:24,000

it so we need to speak up need to let

194

00:12:31,189 --> 00:12:25,470

Trump know man he's got to do the right

195

00:12:34,639 --> 00:12:31,199

thing the Internet is ours ok all right

196

00:12:37,189 --> 00:12:34,649

I'm stellar it is absolutely beautiful

197

00:12:39,800 --> 00:12:37,199

and if you haven't registered and gone

198

00:12:42,620 --> 00:12:39,810

over and started hanging out with

199

00:12:45,680 --> 00:12:42,630

everybody else apparently except you

200

00:12:46,370 --> 00:12:45,690

just go down stellar com register you

201
00:12:48,770 --> 00:12:46,380
can use my

202
00:12:53,590 --> 00:12:48,780
Oh Jimmy and you do that you'll get an

203
00:12:56,690 --> 00:12:53,600
extra 15 tokens our on stellar tokens

204
00:12:59,180 --> 00:12:56,700
that will be there in your wallet and

205
00:13:01,970 --> 00:12:59,190
you'll have 25 tokens there instead of

206
00:13:05,390 --> 00:13:01,980
10 you get 15 if you use my promo code

207
00:13:07,280 --> 00:13:05,400
yeah free tokens so go and register

208
00:13:09,320 --> 00:13:07,290
you'll be able to use your tokens in

209
00:13:11,780 --> 00:13:09,330
about a month as soon as we finish up

210
00:13:15,650 --> 00:13:11,790
other things that we need to get through

211
00:13:19,520 --> 00:13:15,660
we are now officially in the beta phase

212
00:13:22,570 --> 00:13:19,530
of on stellar it's absolutely incredible

213
00:13:25,010 --> 00:13:22,580

it runs beautifully it looks beautiful

214

00:13:26,810 --> 00:13:25,020

we have thousands and thousands of

215

00:13:31,460 --> 00:13:26,820

people over there hanging out right now

216

00:13:34,070 --> 00:13:31,470

so go build up your friends list share

217

00:13:36,920 --> 00:13:34,080

the knowledge have fun it's absolutely

218

00:13:38,720 --> 00:13:36,930

incredible and I spend my days over

219

00:13:41,480 --> 00:13:38,730

there now used to spend my social media

220

00:13:43,040 --> 00:13:41,490

time over on Facebook and I've just lost

221

00:13:49,070 --> 00:13:43,050

interest I don't care anymore

222

00:13:53,510 --> 00:13:49,080

I really really don't care and the the

223

00:13:57,770 --> 00:13:53,520

fun the lack of advertising the no data

224

00:14:00,320 --> 00:13:57,780

mining all of these things make on

225

00:14:03,500 --> 00:14:00,330

stellar great because that changes the

226

00:14:09,050 --> 00:14:03,510

user experience but for me more

227

00:14:12,230 --> 00:14:09,060

importantly it's it's a platform that is

228

00:14:17,360 --> 00:14:12,240

built for this community that you can go

229

00:14:20,150 --> 00:14:17,370

and not only share and make friends but

230

00:14:23,720 --> 00:14:20,160

we all enjoy social media everybody does

231

00:14:27,230 --> 00:14:23,730

and so your social media experience the

232

00:14:30,470 --> 00:14:27,240

things that you liked about social media

233

00:14:34,400 --> 00:14:30,480

or enjoy about social media today every

234

00:14:36,350 --> 00:14:34,410

all of that is is there but it's the

235

00:14:38,240 --> 00:14:36,360

other features and the way that it's

236

00:14:39,530 --> 00:14:38,250

designed and the additional stuff that

237

00:14:41,810 --> 00:14:39,540

you can do there that you can't do

238

00:14:44,300 --> 00:14:41,820

anywhere else and you start to explore

239

00:14:47,120 --> 00:14:44,310

and poke around and you realize this is

240

00:14:51,320 --> 00:14:47,130

where it's at it's absolutely incredible

241

00:14:53,510 --> 00:14:51,330

so go now on stellar dot-com get

242

00:14:56,360 --> 00:14:53,520

registered use my referral code Jimmy

243

00:14:59,930 --> 00:14:56,370

get those extra tokens it's based on the

244

00:15:03,800 --> 00:14:59,940

blockchain decentralized token

245

00:15:06,440 --> 00:15:03,810

and now you can reward and get rewarded

246

00:15:09,110 --> 00:15:06,450

for hanging out on social media and

247

00:15:13,330 --> 00:15:09,120

contributing to our community it is just

248

00:15:15,050 --> 00:15:13,340

a wonderful place on stellar dot-com and

249

00:15:16,340 --> 00:15:15,060

there you go

250

00:15:18,440 --> 00:15:16,350

I've got some other things that I need

251
00:15:21,260 --> 00:15:18,450
to get out of the way because I have got

252
00:15:23,480 --> 00:15:21,270
some news today that I need to discuss

253
00:15:26,390 --> 00:15:23,490
with you that is absolutely gonna flip

254
00:15:27,980 --> 00:15:26,400
you out so I'm gonna save that I'll get

255
00:15:30,740 --> 00:15:27,990
to that just a second we've got R is

256
00:15:35,540 --> 00:15:30,750
Burke at the bottom of the hour our next

257
00:15:39,020 --> 00:15:35,550
event is coming up in just two short

258
00:15:41,870 --> 00:15:39,030
weeks Oh a blink of an eye and contact

259
00:15:46,550 --> 00:15:41,880
in the desert is here June 1st through

260
00:15:48,500 --> 00:15:46,560
the 4th 2018 Indian Wells Palm Springs

261
00:15:50,300 --> 00:15:48,510
Southern California you're gonna come

262
00:15:53,630 --> 00:15:50,310
and hang out with all of us at the

263
00:15:56,090 --> 00:15:53,640

Renaissance Resort and Spa programming

264

00:15:58,580 --> 00:15:56,100

note Friday night will be broadcasting

265

00:16:00,530 --> 00:15:58,590

fade to black live in front of a studio

266

00:16:04,280 --> 00:16:00,540

audience like we do every year at

267

00:16:07,190 --> 00:16:04,290

contact in the desert Saturday night is

268

00:16:08,540 --> 00:16:07,200

the awards ceremony and if you haven't

269

00:16:11,080 --> 00:16:08,550

got your tickets for that's probably

270

00:16:13,670 --> 00:16:11,090

already sold out but I'll be doing that

271

00:16:16,460 --> 00:16:13,680

Saturday night with George Noory I'm

272

00:16:19,940 --> 00:16:16,470

also hosting Saturday night the big

273

00:16:23,000 --> 00:16:19,950

magic show spectacular I'm gonna do that

274

00:16:26,570 --> 00:16:23,010

on Saturday night Sunday night I will be

275

00:16:30,200 --> 00:16:26,580

hosting the closing ceremonies and the

276

00:16:34,490 --> 00:16:30,210

closing panel discussion on Sunday night

277

00:16:36,290 --> 00:16:34,500

and who we have on that panel and what

278

00:16:40,310 --> 00:16:36,300

is gonna go down there plus I've got a

279

00:16:41,810 --> 00:16:40,320

few surprise guests that are going to be

280

00:16:44,600 --> 00:16:41,820

there for that panel and the closing

281

00:16:49,040 --> 00:16:44,610

night there everybody's all packed it's

282

00:16:51,850 --> 00:16:49,050

going to be a huge event but that is is

283

00:16:55,010 --> 00:16:51,860

getting planned right now and I was on

284

00:16:56,480 --> 00:16:55,020

working with the good people over a

285

00:16:57,790 --> 00:16:56,490

contact in the desert you know crystal

286

00:17:00,140 --> 00:16:57,800

and Victoria with Rita

287

00:17:03,770 --> 00:17:00,150

getting all of this set up it's going to

288

00:17:05,540 --> 00:17:03,780

be amazing so come on out you want to

289

00:17:06,950 --> 00:17:05,550

hang out in Southern California don't

290

00:17:08,210 --> 00:17:06,960

you you want to go to Palm Springs don't

291

00:17:10,190 --> 00:17:08,220

you want to hang out the fader now

292

00:17:12,650 --> 00:17:10,200

selling to you right you want to go into

293

00:17:13,250 --> 00:17:12,660

that night vision right all of those

294

00:17:15,079 --> 00:17:13,260

things

295

00:17:17,720 --> 00:17:15,089

that you've heard about the fader knots

296

00:17:21,020 --> 00:17:17,730

and Rita and myself at contacting the

297

00:17:23,420 --> 00:17:21,030

desert all of it's true it's all truth

298

00:17:25,400 --> 00:17:23,430

the rumors are true we have a good time

299

00:17:27,680 --> 00:17:25,410

there so come and hang out with this get

300

00:17:29,870 --> 00:17:27,690

your tickets all the info that you need

301

00:17:32,030 --> 00:17:29,880

is right there a contact in the desert

302

00:17:35,240 --> 00:17:32,040

comm click on the banner of it Jimmy

303

00:17:37,730 --> 00:17:35,250

Church radio now don't forget to sign up

304

00:17:40,400 --> 00:17:37,740

for our soul tech gathering up at ISA T

305

00:17:42,050 --> 00:17:40,410

ranch it's this August 9th through the

306

00:17:45,350 --> 00:17:42,060

12th you want to go to Seoul tech

307

00:17:48,290 --> 00:17:45,360

gathering dot-com and we're gonna have

308

00:17:50,660 --> 00:17:48,300

Corey good this year we've got james

309

00:17:53,870 --> 00:17:50,670

gilliland speaking Jason quit Matthew

310

00:17:56,210 --> 00:17:53,880

Ryan Mikayla Sheldon Theresa NRA's Holly

311

00:17:58,960 --> 00:17:56,220

marine Mary Gabriel

312

00:18:03,470 --> 00:17:58,970

Ashley John lund and Dana Harvey all

313

00:18:05,930 --> 00:18:03,480

teaching you all weekend long and and I

314

00:18:07,850 --> 00:18:05,940

say this but I mean this memories are

315

00:18:10,460 --> 00:18:07,860

made friendships are made that are gonna

316

00:18:13,250 --> 00:18:10,470

last a lifetime and we're gonna be out

317

00:18:15,650 --> 00:18:13,260

there at the Field of Dreams skywatching

318

00:18:17,600 --> 00:18:15,660

we're gonna be looking for Bigfoot and

319

00:18:19,640 --> 00:18:17,610

that's gonna happen too by the way

320

00:18:22,160 --> 00:18:19,650

and all the other magic that happens up

321

00:18:25,880 --> 00:18:22,170

at ISA D it's gonna be absolutely

322

00:18:27,530 --> 00:18:25,890

amazing and a great event so please go

323

00:18:33,800 --> 00:18:27,540

and get your tickets now or were only

324

00:18:38,750 --> 00:18:33,810

selling 300 also also the the week after

325

00:18:42,410 --> 00:18:38,760

that I will be out in Colorado for Cory

326

00:18:44,810 --> 00:18:42,420

goods event and so there he kind of was

327

00:18:48,440 --> 00:18:44,820

busy what a busy summer Rita and I said

328

00:18:51,530 --> 00:18:48,450

you know 2018 you know the last few

329

00:18:53,930 --> 00:18:51,540

years we've been doing you know 8 10 12

330

00:18:56,320 --> 00:18:53,940

events a year and you do that an event

331

00:18:59,210 --> 00:18:56,330

every month a couple events a month and

332

00:19:00,710 --> 00:18:59,220

it really wears you down it's a lot of

333

00:19:03,260 --> 00:19:00,720

fun getting out there but we have to get

334

00:19:05,660 --> 00:19:03,270

back into town and and do another string

335

00:19:08,690 --> 00:19:05,670

of shows and another week and and it's

336

00:19:11,660 --> 00:19:08,700

it's it's crazy what it does to the year

337

00:19:14,260 --> 00:19:11,670

the year just blows by and we decided to

338

00:19:19,790 --> 00:19:14,270

slow down this year well apparently

339

00:19:21,830 --> 00:19:19,800

that's not happening love getting out

340

00:19:23,960 --> 00:19:21,840

there and hanging out with all of you so

341

00:19:26,390 --> 00:19:23,970

there you go we'll see everybody in two

342

00:19:29,090 --> 00:19:26,400

weeks of contact in the desert and then

343

00:19:31,280 --> 00:19:29,100

right after that Seoul tech gathering

344

00:19:33,620 --> 00:19:31,290

and then dimensions of disclosure Cori

345

00:19:36,410 --> 00:19:33,630

Goods event which is the week after that

346

00:19:38,720 --> 00:19:36,420

third week of August don't forget to

347

00:19:41,660 --> 00:19:38,730

subscribe to our podcast we have over

348

00:19:44,510 --> 00:19:41,670

850 archived shows custom apps Apple

349

00:19:46,520 --> 00:19:44,520

Android just two dollars a month click

350

00:19:48,590 --> 00:19:46,530

on the banner over to maturity oak on

351
00:19:50,780 --> 00:19:48,600
the podcast banner you can also become a

352
00:19:53,210 --> 00:19:50,790
fade or not Terry just tweeted I just

353
00:19:57,020 --> 00:19:53,220
saw this hold up the new shirts for the

354
00:20:01,100 --> 00:19:57,030
bunker cam and I might be able to pull

355
00:20:02,930 --> 00:20:01,110
that off in the next break and so yeah

356
00:20:05,980 --> 00:20:02,940
there's a reason why I can actually do

357
00:20:08,870 --> 00:20:05,990
that tonight Terry but if you renew your

358
00:20:13,730 --> 00:20:08,880
game-changer you get the new fade to

359
00:20:15,620 --> 00:20:13,740
black t-shirts okay ight now let us know

360
00:20:16,850 --> 00:20:15,630
- when you renew if you don't want the

361
00:20:22,040 --> 00:20:16,860
new shirt and you want the old one let

362
00:20:24,440 --> 00:20:22,050
us know but all right let's see

363
00:20:26,690 --> 00:20:24,450

oh hell Jimmy how in the world can I get

364

00:20:29,150 --> 00:20:26,700

you over to my megalithic sunroom in

365

00:20:34,900 --> 00:20:29,160

Colorado it's 25 minutes away from

366

00:20:41,990 --> 00:20:38,930

Stacy Stacy you're too warm and kind

367

00:20:44,570 --> 00:20:42,000

alrights where am I at

368

00:20:45,920 --> 00:20:44,580

I've got to get to this now I don't

369

00:20:48,440 --> 00:20:45,930

forget all of our sponsors here life

370

00:20:50,840 --> 00:20:48,450

change t Captain T calm River moon

371

00:20:53,630 --> 00:20:50,850

coffee ancient life oil sacred skulls

372

00:20:55,850 --> 00:20:53,640

new manna food storage and bearing

373

00:21:01,820 --> 00:20:55,860

optics let's get this show crackin happy

374

00:21:06,830 --> 00:21:01,830

birthday to today oh I didn't I didn't

375

00:21:09,200 --> 00:21:06,840

do that's right I skipped over I was so

376

00:21:17,300 --> 00:21:09,210

busy today because on this day in

377

00:21:20,300 --> 00:21:17,310

history o TD 2010 Ronnie James Dio left

378

00:21:24,440 --> 00:21:20,310

this earth to sing for another audience

379

00:21:32,270 --> 00:21:24,450

Oh somebody just posted there you go

380

00:21:33,350 --> 00:21:32,280

and I I'll say this when when I started

381

00:21:35,780 --> 00:21:33,360

going through my thoughts with that

382

00:21:37,940 --> 00:21:35,790

today and and I wrote up a little

383

00:21:39,369 --> 00:21:37,950

article that I posted over at on stellar

384

00:21:44,089 --> 00:21:39,379

you can go and

385

00:21:49,249 --> 00:21:44,099

and read that and every year you know on

386

00:21:52,369 --> 00:21:49,259

this day every year and I just I kind of

387

00:21:55,609 --> 00:21:52,379

get bummed out and and I don't want to

388

00:21:57,409 --> 00:21:55,619

be bummed out because of Ronnie he left

389

00:22:01,159 --> 00:21:57,419

way too early and at the prime of

390

00:22:05,239 --> 00:22:01,169

everything for him but you know you go

391

00:22:07,219 --> 00:22:05,249

through and and you you try to remember

392

00:22:09,229 --> 00:22:07,229

some things and you want to share it

393

00:22:11,479 --> 00:22:09,239

with everybody of course you know in

394

00:22:13,909 --> 00:22:11,489

Ronnie's memory and then you listen to

395

00:22:17,539 --> 00:22:13,919

you know some music which I did today

396

00:22:19,219 --> 00:22:17,549

and cranked it up and and you know it

397

00:22:22,219 --> 00:22:19,229

just bums me out

398

00:22:23,989 --> 00:22:22,229

bums me out so I asked everybody today

399

00:22:28,669 --> 00:22:23,999

just go listen to some Ronnie go listen

400

00:22:31,820 --> 00:22:28,679

to some Bo and and he can appreciate you

401
00:22:33,950 --> 00:22:31,830
know his gift because he was truly one

402
00:22:35,869 --> 00:22:33,960
of the greatest if not the greatest rock

403
00:22:38,649 --> 00:22:35,879
singer in the history of everything

404
00:22:43,329 --> 00:22:38,659
Ronnie James Dio on this day in history

405
00:22:49,279 --> 00:22:43,339
2010 passed away from cancer fader fact

406
00:22:52,570 --> 00:22:49,289
the first accountant in history okay now

407
00:22:56,320 --> 00:22:52,580
now I'm gonna say this again the first

408
00:22:59,570 --> 00:22:56,330
accountant in history

409
00:23:03,909 --> 00:22:59,580
his name was Khushi

410
00:23:12,409 --> 00:23:03,919
that's right he was from Mesopotamia and

411
00:23:15,919 --> 00:23:12,419
he lived around 3200 BC and that is a

412
00:23:18,649 --> 00:23:15,929
fader fact that's a cool that's a cool

413
00:23:20,359 --> 00:23:18,659

fact right there tonight's very special

414

00:23:21,739 --> 00:23:20,369

guest star is burn and got a lump in my

415

00:23:24,409 --> 00:23:21,749

throat see that's why I don't want to

416

00:23:28,579 --> 00:23:24,419

talk about Ronnie right I got a lump it

417

00:23:31,070 --> 00:23:28,589

hurts hurts I need James Dio tonight

418

00:23:32,839 --> 00:23:31,080

very special guest R is Burke is here

419

00:23:37,729 --> 00:23:32,849

we're going to talk about his article on

420

00:23:39,289 --> 00:23:37,739

killer AI and it's an incredible article

421

00:23:40,430 --> 00:23:39,299

and I put up the links over at on

422

00:23:42,919 --> 00:23:40,440

stellar you can go and check it out

423

00:23:44,209 --> 00:23:42,929

there we'll get it up here in in Twitter

424

00:23:47,269 --> 00:23:44,219

in just a second

425

00:23:47,959 --> 00:23:47,279

and tomorrow night of course is Jon

426

00:23:49,519 --> 00:23:47,969

Rappoport

427

00:23:51,440 --> 00:23:49,529

fate or night and there's no more fake

428

00:23:52,330 --> 00:23:51,450

newsroom live followed by open lines all

429

00:23:56,080 --> 00:23:52,340

night long

430

00:23:59,279 --> 00:23:56,090

okay here we go and I have a lump in my

431

00:24:10,419 --> 00:24:04,930

River moon coffee its doc got a lump in

432

00:24:14,799 --> 00:24:10,429

my throat here we go in a I got a lump

433

00:24:17,380 --> 00:24:14,809

in my throat people all right hi I hope

434

00:24:23,730 --> 00:24:17,390

you understand in a published report

435

00:24:28,769 --> 00:24:23,740

from earlier this week we got this

436

00:24:36,659 --> 00:24:28,779

octopus's came to Earth from space as

437

00:24:42,070 --> 00:24:36,669

frozen eggs that's right the headline

438

00:24:44,919 --> 00:24:42,080

read just that octopuses are aliens

439

00:24:47,350 --> 00:24:44,929

which evolved on another planet before

440

00:24:53,230 --> 00:24:47,360

arriving on earth hundreds of millions

441

00:24:56,950 --> 00:24:53,240

of years ago as crypto served eggs via

442

00:25:01,750 --> 00:24:56,960

process known as panspermia the report

443

00:25:06,630 --> 00:25:01,760

is entitled wait for it cause of

444

00:25:10,470 --> 00:25:06,640

Cambrian explosion terrestrial or cosmic

445

00:25:14,320 --> 00:25:10,480

which was co-authored by a group of 33

446

00:25:17,320 --> 00:25:14,330

scientists and published in the progress

447

00:25:20,529 --> 00:25:17,330

in biophysics and molecular biology

448

00:25:25,240 --> 00:25:20,539

journal of some things you just can't

449

00:25:27,159 --> 00:25:25,250

make up now listen to me the paper says

450

00:25:29,260 --> 00:25:27,169

that the explanation for the sudden

451
00:25:32,620 --> 00:25:29,270
flourishing of life during the Cambrian

452
00:25:36,639 --> 00:25:32,630
era often referred to as the Cambrian

453
00:25:40,090 --> 00:25:36,649
explosion lies in the Stars as a result

454
00:25:44,500 --> 00:25:40,100
of the earth being bombarded by clouds

455
00:25:46,419 --> 00:25:44,510
of organic molecules but the scientists

456
00:25:50,950 --> 00:25:46,429
go on to make it even more extraordinary

457
00:25:53,620 --> 00:25:50,960
claim concerning octopuses which seem to

458
00:25:58,120 --> 00:25:53,630
have evolved on earth quite rapidly

459
00:26:01,510 --> 00:25:58,130
something like 270 million years ago 250

460
00:26:06,070 --> 00:26:01,520
million years after the Cambrian

461
00:26:09,509 --> 00:26:06,080
explosion the paper states and

462
00:26:12,909 --> 00:26:09,519
I'm quoting the genome of the octopus

463
00:26:18,299 --> 00:26:12,919

shows a staggering level of complexity

464

00:26:25,149 --> 00:26:18,309

with 33,000 protein coding genes more

465

00:26:27,490 --> 00:26:25,159

than is present in us Homo sapiens now I

466

00:26:32,799 --> 00:26:27,500

am going to quote from the paper here

467

00:26:35,289 --> 00:26:32,809

and listen to every word quote it's

468

00:26:38,649 --> 00:26:35,299

large brain and sophisticated nervous

469

00:26:41,379 --> 00:26:38,659

system camera like eyes flexible bodies

470

00:26:44,860 --> 00:26:41,389

instantaneous camouflage via the ability

471

00:26:46,450 --> 00:26:44,870

to switch color and shape are just a few

472

00:26:50,860 --> 00:26:46,460

of the striking features that appear

473

00:26:53,230 --> 00:26:50,870

suddenly on the evolutionary chain the

474

00:26:56,259 --> 00:26:53,240

transformative genes leading to the

475

00:27:00,310 --> 00:26:56,269

consensus consensus ancestral Nautilus

476
00:27:02,529 --> 00:27:00,320
to the common cuttlefish to squid - to

477
00:27:05,889 --> 00:27:02,539
the common are not yet easily to be

478
00:27:10,720 --> 00:27:05,899
found in any pre-existing life form it

479
00:27:12,940 --> 00:27:10,730
is plausible it is plausible than to

480
00:27:16,210 --> 00:27:12,950
suggest they seem to be borrowed from a

481
00:27:17,019 --> 00:27:16,220
far distant future in terms of

482
00:27:20,409 --> 00:27:17,029
terrestrial

483
00:27:23,610 --> 00:27:20,419
evolution or more realistically from the

484
00:27:26,950 --> 00:27:23,620
cosmos at large one plausible

485
00:27:29,919 --> 00:27:26,960
explanation in our view is that the new

486
00:27:34,000 --> 00:27:29,929
genes are likely new extraterrestrial

487
00:27:36,730 --> 00:27:34,010
imports to earth more plausibly as an

488
00:27:41,440 --> 00:27:36,740

already coherent group of functioning

489

00:27:46,259 --> 00:27:41,450

genes within say crypto krill served and

490

00:27:50,889 --> 00:27:46,269

matrix protected fertilized octopus eggs

491

00:27:55,210 --> 00:27:50,899

thus the possibility that crypto served

492

00:27:57,789 --> 00:27:55,220

squid and/or octopus eggs arrived in icy

493

00:28:00,850 --> 00:27:57,799

bolide several hundred million years ago

494

00:28:03,399 --> 00:28:00,860

and should not be discounted as that

495

00:28:08,250 --> 00:28:03,409

would be a cosmic explanation for the

496

00:28:15,310 --> 00:28:08,260

octopus sudden emergence on earth circa

497

00:28:23,740 --> 00:28:20,470

makes sense really since octopuses are

498

00:28:26,730 --> 00:28:23,750

regarded as the most intelligence of all

499

00:28:31,690 --> 00:28:26,740

non vertebrates with the highest

500

00:28:35,710 --> 00:28:31,700

brain-to-body ratio and then you have to

501

00:28:38,520 --> 00:28:35,720

think about this because I did think

502

00:28:44,920 --> 00:28:38,530

about that film that came out 2016

503

00:28:47,580 --> 00:28:44,930

arrival and I remember when when the ETS

504

00:28:52,950 --> 00:28:47,590

came out from the fog

505

00:28:55,750 --> 00:28:52,960

they were giant octopuses weren't they

506

00:29:00,010 --> 00:28:55,760

this is one of the most incredible

507

00:29:04,240 --> 00:29:00,020

published scientific papers reports and

508

00:29:08,020 --> 00:29:04,250

research studies I have ever read and it

509

00:29:12,460 --> 00:29:08,030

is indeed incredible so when somebody

510

00:29:16,540 --> 00:29:12,470

says to you you know when will et get

511

00:29:17,260 --> 00:29:16,550

here you can bring up the octopus think

512

00:29:22,300 --> 00:29:17,270

about it

513

00:29:26,950 --> 00:29:22,310

it's a crazy thought right now have you

514

00:29:30,120 --> 00:29:26,960

ever have you ever seen an octopus open

515

00:29:33,220 --> 00:29:30,130

up a jar you've seen those videos right

516

00:29:35,940 --> 00:29:33,230

octopus and a tank they drop a jar in

517

00:29:39,390 --> 00:29:35,950

maybe put some food right that octopus

518

00:29:44,520 --> 00:29:39,400

unscrews the jar just pops the top off

519

00:29:49,270 --> 00:29:44,530

it's like nothing truly truly

520

00:29:53,800 --> 00:29:49,280

magnificent so there you go the

521

00:29:56,470 --> 00:29:53,810

octopuses appeared complete done unlike

522

00:30:00,600 --> 00:29:56,480

anything else in the evolutionary chain

523

00:30:05,170 --> 00:30:00,610

allegedly evolutionary I might add and

524

00:30:08,950 --> 00:30:05,180

when we think about us here and how we

525

00:30:12,700 --> 00:30:08,960

just appeared here a hundred and fifty

526
00:30:16,270 --> 00:30:12,710
thousand years ago that we just appeared

527
00:30:21,670 --> 00:30:16,280
with the correct forehead no hair on our

528
00:30:25,840 --> 00:30:21,680
bodies right the ability to speak think

529
00:30:27,779 --> 00:30:25,850
laugh emotions everything think about

530
00:30:36,299 --> 00:30:27,789
that

531
00:30:38,399 --> 00:30:36,309
the the report is unbelievable and I

532
00:30:41,369 --> 00:30:38,409
will give it to you here one more time

533
00:30:46,249 --> 00:30:41,379
it's published in the progress in

534
00:30:49,289 --> 00:30:46,259
biophysics and molecular biology journal

535
00:30:53,700 --> 00:30:49,299
it's unbelievable unbelievable

536
00:30:54,810 --> 00:30:53,710
unbelievable to read 33 scientists all

537
00:30:56,310 --> 00:30:54,820
right tonight

538
00:31:00,989 --> 00:30:56,320

rizz Burke is here we're gonna talk

539

00:31:04,889 --> 00:31:00,999

about killer AI tomorrow night is Fator

540

00:31:06,239 --> 00:31:04,899

night my favorite night of the week Jon

541

00:31:08,669 --> 00:31:06,249

Rappoport is good to be here

542

00:31:11,609 --> 00:31:08,679

no more fake newsroom live followed by

543

00:31:13,200 --> 00:31:11,619

your phone calls all night long what a

544

00:31:15,509 --> 00:31:13,210

great week we've had here on fade to

545

00:31:18,029 --> 00:31:15,519

black everything going on with on

546

00:31:20,820 --> 00:31:18,039

stellar at the same time this is a

547

00:31:23,099 --> 00:31:20,830

wonderful wonderful beautiful blue

548

00:31:26,460 --> 00:31:23,109

planet that we live on and I get to do

549

00:31:27,839 --> 00:31:26,470

all of this hanging out with you

550

00:31:30,239 --> 00:31:27,849

fade to black I'm you'll see me Church

551
00:31:32,650 --> 00:31:30,249
I'll be right back with our guests rizz

552
00:32:03,460 --> 00:31:32,660
Virg stay with me

553
00:32:09,850 --> 00:32:06,500
you're listening to Jimmy Church fade to

554
00:32:16,340 --> 00:32:12,830
fade to black will now pause for Aiden

555
00:32:24,080 --> 00:32:16,350
identification the station that talks

556
00:32:26,750 --> 00:32:24,090
that kgr a radio when you take the beams

557
00:32:29,299 --> 00:32:26,760
from Central America with dashes of

558
00:32:31,700 --> 00:32:29,309
Indonesian and African mixed in and then

559
00:32:34,549 --> 00:32:31,710
roast it to the dark side of fade to

560
00:32:37,730 --> 00:32:34,559
black you create the ultimate brew of

561
00:32:41,480 --> 00:32:37,740
Fringe introducing the fade to black

562
00:32:44,060 --> 00:32:41,490
blend from River moon coffee yes River

563
00:32:45,710 --> 00:32:44,070

moons darkest customized roast was

564

00:32:49,340 --> 00:32:45,720

created for the love of

565

00:32:51,890 --> 00:32:49,350

fade to black the alchemy of masterful

566

00:32:55,130 --> 00:32:51,900

roasting and smoking the beans is in

567

00:32:59,330 --> 00:32:55,140

every sip of this full-bodied dark Java

568

00:33:01,640 --> 00:32:59,340

I need my coffee dog deep with distinct

569

00:33:04,370 --> 00:33:01,650

bittersweet chocolate highlights just

570

00:33:06,799 --> 00:33:04,380

like the bunker leaning further into the

571

00:33:10,070 --> 00:33:06,809

darkness of the roast is fade to black

572

00:33:11,750 --> 00:33:10,080

blend from River moon coffee just click

573

00:33:15,049 --> 00:33:11,760

on the banner at Jimmy Church radio.com

574

00:33:20,080 --> 00:33:15,059

and use the promo code F to B blend for

575

00:33:22,669 --> 00:33:20,090

15% off of your order today gobekli tepe

576

00:33:24,980 --> 00:33:22,679

what can I say about the most popular

577

00:33:27,380 --> 00:33:24,990

tea on the Internet and what a customers

578

00:33:31,549 --> 00:33:27,390

say about life change to eat at get the

579

00:33:34,580 --> 00:33:31,559

tea calm a lot but by federal law we get

580

00:33:36,770 --> 00:33:34,590

the t.com cannot make claims to how this

581

00:33:38,780 --> 00:33:36,780

product can enhance your health we

582

00:33:41,510 --> 00:33:38,790

cannot even post our testimonies without

583

00:33:43,970 --> 00:33:41,520

being in compliance so how do we get

584

00:33:46,430 --> 00:33:43,980

past the hump try our products that get

585

00:33:49,760 --> 00:33:46,440

the tea calm and see for yourself you

586

00:33:51,549 --> 00:33:49,770

can send us a testimony but we just

587

00:33:55,520 --> 00:33:51,559

can't post it bumper

588

00:33:57,200 --> 00:33:55,530

our products are GMO free and organic we

589

00:33:59,570 --> 00:33:57,210

pride ourself in being the best we can

590

00:34:02,299 --> 00:33:59,580

be and we urge you to take charge of

591

00:34:04,370 --> 00:34:02,309

your health we're loving you're strong

592

00:34:06,560 --> 00:34:04,380

and many of our customers have shared

593

00:34:09,440 --> 00:34:06,570

their successes with friends and family

594

00:34:13,200 --> 00:34:09,450

protect your colon log on to get the tea

595

00:34:19,680 --> 00:34:13,210

calm that's get the t-dot-com

596

00:34:25,260 --> 00:34:19,690

the t-dot-com get t.com nine out of ten

597

00:34:30,569 --> 00:34:25,270

geneticists agreed fade to black

598

00:34:34,950 --> 00:34:30,579

is not your father's radio show on the

599

00:34:41,280 --> 00:34:34,960

game changer radio network and k GRA the

600

00:34:42,899 --> 00:34:41,290

planet with KCRA this summer tickets and

601
00:34:45,089 --> 00:34:42,909
hotel accommodations to the biggest

602
00:34:47,280 --> 00:34:45,099
conferences autographed books and DVDs

603
00:34:49,319 --> 00:34:47,290
chances to win all-inclusive conference

604
00:34:52,680 --> 00:34:49,329
cruises and private dinners with your

605
00:34:55,319 --> 00:34:52,690
favorite kgr a hosts click the contest

606
00:34:57,450 --> 00:34:55,329
to have at kgr a radio.com for your

607
00:34:59,609 --> 00:34:57,460
chance to win big this summer your

608
00:35:01,079 --> 00:34:59,619
contact for the best alternative talk

609
00:35:05,090 --> 00:35:01,089
radio on the planet

610
00:35:09,720 --> 00:35:06,860
[Music]

611
00:35:11,250 --> 00:35:09,730
hi this is Rob Reiner from anvil and

612
00:35:14,420 --> 00:35:11,260
you're listening to Jimmy Church

613
00:35:33,660 --> 00:35:16,650

what up in that combat and we're

614

00:35:37,239 --> 00:35:35,130

[Music]

615

00:35:39,940 --> 00:35:37,249

all right welcome back pay the black

616

00:35:43,269 --> 00:35:39,950

coming up see me Church yeah I'm in a

617

00:35:45,940 --> 00:35:43,279

great mood great mood got that lump out

618

00:35:49,269 --> 00:35:45,950

of my throat show must go on as Ronnie

619

00:35:51,460 --> 00:35:49,279

would Zig tonight rizz Burke is with us

620

00:35:52,390 --> 00:35:51,470

tomorrow night is Fator night open lines

621

00:35:54,819 --> 00:35:52,400

all night long

622

00:36:00,089 --> 00:35:54,829

Jon Rappoport is gonna be here with his

623

00:36:04,210 --> 00:36:00,099

no more fake newsroom live after Riz

624

00:36:06,640 --> 00:36:04,220

posted his article man I think it was

625

00:36:09,039 --> 00:36:06,650

two weeks ago now I immediately called

626

00:36:10,720 --> 00:36:09,049

rizz and said what is going on with this

627

00:36:14,140 --> 00:36:10,730

and because you're calling me to get on

628

00:36:17,559 --> 00:36:14,150

the show right I said yes so first

629

00:36:20,049 --> 00:36:17,569

things we we made this special

630

00:36:23,920 --> 00:36:20,059

arrangement tonight to have R is here he

631

00:36:25,779 --> 00:36:23,930

is a successful entrepreneur angel

632

00:36:27,789 --> 00:36:25,789

investor best-selling author video game

633

00:36:30,549 --> 00:36:27,799

industry pioneer independent film

634

00:36:34,720 --> 00:36:30,559

producer he currently runs Bayview labs

635

00:36:36,640 --> 00:36:34,730

and play labs at MIT startup accelerator

636

00:36:39,819 --> 00:36:36,650

held on campus at the Massachusetts

637

00:36:41,440 --> 00:36:39,829

Institute of Technology rizz received a

638

00:36:44,799 --> 00:36:41,450

BS in computer science and engineering

639

00:36:45,700 --> 00:36:44,809

from MIT and MS and management from

640

00:36:48,849 --> 00:36:45,710

Stanford's

641

00:36:50,910 --> 00:36:48,859

GSB Riza's many startups have created

642

00:36:53,380 --> 00:36:50,920

products used by thousands of enterprise

643

00:36:55,749 --> 00:36:53,390

customers and his games have been

644

00:37:00,299 --> 00:36:55,759

downloaded millions of times including

645

00:37:04,269 --> 00:37:00,309

tap fish bingo run penny dreadful

646

00:37:06,009 --> 00:37:04,279

dimande and grim the cards of fate rizz

647

00:37:09,220 --> 00:37:06,019

has invested in many startups including

648

00:37:11,470 --> 00:37:09,230

Tapjoy telltale games discord fun zo

649

00:37:14,440 --> 00:37:11,480

pocket gems moon express and many others

650

00:37:17,680 --> 00:37:14,450

he has also produced many independent

651
00:37:20,130 --> 00:37:17,690
films including turquoise Rose thrive an

652
00:37:23,380 --> 00:37:20,140
amazing film what on earth will it take

653
00:37:25,960 --> 00:37:23,390
serious and the cult classic Knights of

654
00:37:28,450 --> 00:37:25,970
Badassdom starring the one and only

655
00:37:31,479 --> 00:37:28,460
Peter Dinklage tonight we're gonna

656
00:37:35,079 --> 00:37:31,489
discuss his latest article the road to

657
00:37:40,599 --> 00:37:35,089
killer AI ml plus blockchain plus io t

658
00:37:43,420 --> 00:37:40,609
plus drones equals Skynet his website is

659
00:37:45,250 --> 00:37:43,430
Xen entrepreneur.com the links are over

660
00:37:47,260 --> 00:37:45,260
Jimmy Church radio calm I do

661
00:37:49,960 --> 00:37:47,270
come back the one and only rizz Burke

662
00:37:52,330 --> 00:37:49,970
rizz good evening how are you good

663
00:37:58,330 --> 00:37:52,340

evening Jimmy it's great to be back you

664

00:38:01,930 --> 00:37:58,340

know rizz look MIT Stanford investor

665

00:38:03,820 --> 00:38:01,940

Silicon Valley web internet genius I'm

666

00:38:06,580 --> 00:38:03,830

totally intimidated by you

667

00:38:08,710 --> 00:38:06,590

but you're such a cool guy should I be

668

00:38:10,780 --> 00:38:08,720

intimidated because I don't have all of

669

00:38:13,870 --> 00:38:10,790

those credentials you know I don't have

670

00:38:16,330 --> 00:38:13,880

a CV like that well Jimmy you're a

671

00:38:18,640 --> 00:38:16,340

pretty cool guy yourself so I wouldn't

672

00:38:20,290 --> 00:38:18,650

be too intimidated especially tonight

673

00:38:21,430 --> 00:38:20,300

we're gonna be talking you know a little

674

00:38:23,260 --> 00:38:21,440

bit of science and a lot of

675

00:38:26,620 --> 00:38:23,270

science-fiction meld it together so I

676

00:38:28,480 --> 00:38:26,630

think fun discussion so what you're

677

00:38:29,500 --> 00:38:28,490

saying is you bring down the discussion

678

00:38:39,690 --> 00:38:29,510

to my level

679

00:38:43,630 --> 00:38:39,700

all right you know the I remember R is

680

00:38:46,210 --> 00:38:43,640

maybe it was probably two years ago and

681

00:38:47,830 --> 00:38:46,220

I went down got up in the morning went

682

00:38:50,470 --> 00:38:47,840

down to my coffee machine and I was

683

00:38:55,540 --> 00:38:50,480

staring out the kitchen window as I was

684

00:38:58,090 --> 00:38:55,550

grinding some beans and that morning we

685

00:38:59,320 --> 00:38:58,100

had a traffic accident

686

00:39:03,010 --> 00:38:59,330

up the street and it knocked out a

687

00:39:05,980 --> 00:39:03,020

transformer and now I've got solar power

688

00:39:09,760 --> 00:39:05,990

right at the house so I went to grind

689

00:39:11,380 --> 00:39:09,770

the beans and the grinder wasn't running

690

00:39:13,180 --> 00:39:11,390

at full speed it was running at half

691

00:39:15,910 --> 00:39:13,190

speed right because my house is now

692

00:39:18,430 --> 00:39:15,920

running on solar power instead of normal

693

00:39:20,860 --> 00:39:18,440

power and and while I was trying to

694

00:39:22,540 --> 00:39:20,870

figure that out and then I realized that

695

00:39:23,110 --> 00:39:22,550

the power was out then it then it came

696

00:39:25,480 --> 00:39:23,120

back on

697

00:39:30,010 --> 00:39:25,490

but as I was staring out the window I

698

00:39:32,730 --> 00:39:30,020

had this vision what if and I woke up in

699

00:39:37,330 --> 00:39:32,740

the morning and there was nothing

700

00:39:40,180 --> 00:39:37,340

nothing right nothing and we're we lost

701
00:39:42,610 --> 00:39:40,190
the internet and we lost electricity we

702
00:39:46,270 --> 00:39:42,620
lost everything you know now my

703
00:39:49,240 --> 00:39:46,280
refrigerator is is not on my smart

704
00:39:49,900 --> 00:39:49,250
refrigerator right my smartphone is not

705
00:39:53,950 --> 00:39:49,910
working

706
00:39:55,810 --> 00:39:53,960
the because the internet is down

707
00:39:58,210 --> 00:39:55,820
satellites are down

708
00:40:03,610 --> 00:39:58,220
whether you know just some crazy event

709
00:40:05,890 --> 00:40:03,620
where that happened the news I wouldn't

710
00:40:08,470 --> 00:40:05,900
be able to get to find out what happened

711
00:40:12,100 --> 00:40:08,480
right because the news can't get the

712
00:40:13,750 --> 00:40:12,110
news to report out now what do you do

713
00:40:17,020 --> 00:40:13,760

you can't go to your neighbor he doesn't

714

00:40:23,200 --> 00:40:17,030

know and the this would be the beginning

715

00:40:25,870 --> 00:40:23,210

of a very bad day right I mean a bad day

716

00:40:29,440 --> 00:40:25,880

and quite possibly if it continues a

717

00:40:32,040 --> 00:40:29,450

very bad week and and I laid out this

718

00:40:34,420 --> 00:40:32,050

nightmare scenario for everybody because

719

00:40:38,020 --> 00:40:34,430

it's something that we really need to

720

00:40:41,680 --> 00:40:38,030

think about because the IOT the Internet

721

00:40:45,040 --> 00:40:41,690

of Things is everywhere now and it is a

722

00:40:46,720 --> 00:40:45,050

huge industry putting the internet into

723

00:40:50,350 --> 00:40:46,730

your toothbrush right putting it

724

00:40:52,540 --> 00:40:50,360

everywhere and if we continue our

725

00:40:55,690 --> 00:40:52,550

dependency on the Internet if anything

726

00:40:59,200 --> 00:40:55,700

goes wrong it's going to go wrong in a

727

00:41:01,630 --> 00:40:59,210

bad bad way and I got a lot of feedback

728

00:41:04,150 --> 00:41:01,640

about that and I turn around and I read

729

00:41:06,790 --> 00:41:04,160

your article and I'm like this is what

730

00:41:09,180 --> 00:41:06,800

I'm on about people you know I'm not the

731

00:41:12,430 --> 00:41:09,190

only one that thinks about the

732

00:41:16,330 --> 00:41:12,440

complexities of the possibilities of

733

00:41:18,490 --> 00:41:16,340

things taking over and if they go bad if

734

00:41:21,730 --> 00:41:18,500

they choose to go bad we're in a bad

735

00:41:23,620 --> 00:41:21,740

situation aren't we well we certainly

736

00:41:25,630 --> 00:41:23,630

could be and I think you know that's

737

00:41:27,220 --> 00:41:25,640

part of what prompted me to write the

738

00:41:29,980 --> 00:41:27,230

article I mean we've gotten more and

739

00:41:31,660 --> 00:41:29,990

more dependent on I mean not just

740

00:41:33,700 --> 00:41:31,670

electronic so I mean we've had

741

00:41:35,890 --> 00:41:33,710

electrical devices for quite some time

742

00:41:38,680 --> 00:41:35,900

right but we over time everything

743

00:41:41,920 --> 00:41:38,690

started to use electricity and slowly

744

00:41:44,800 --> 00:41:41,930

everything is getting connected to the

745

00:41:47,520 --> 00:41:44,810

Internet and to each other and so you

746

00:41:50,700 --> 00:41:47,530

know that raises this possibility of

747

00:41:52,690 --> 00:41:50,710

cascading failures now on the one hand

748

00:41:54,190 --> 00:41:52,700

you know you've got all these devices

749

00:41:56,020 --> 00:41:54,200

connected if we were to lose all

750

00:41:58,330 --> 00:41:56,030

electricity it may not be the end of the

751
00:41:59,860 --> 00:41:58,340
world in fact it might you know save us

752
00:42:01,960 --> 00:41:59,870
if we were ever in a disaster situation

753
00:42:04,780 --> 00:42:01,970
where you had an AI that was trying to

754
00:42:07,300 --> 00:42:04,790
take over if we had no electricity then

755
00:42:09,220 --> 00:42:07,310
the AI couldn't run you know one of the

756
00:42:11,770 --> 00:42:09,230
gates I'm going to talk about later in

757
00:42:13,960 --> 00:42:11,780
so is this idea of an AI that doesn't

758
00:42:17,050 --> 00:42:13,970
have an off switch and that's really you

759
00:42:19,120 --> 00:42:17,060
know what we have to wonder about well

760
00:42:21,040 --> 00:42:19,130
you know it was during our last show we

761
00:42:22,540 --> 00:42:21,050
were talking about blockchain some of

762
00:42:24,609 --> 00:42:22,550
your listeners might have been listening

763
00:42:26,200 --> 00:42:24,619

that night and towards the air and we

764

00:42:28,000 --> 00:42:26,210

started talking about this idea of

765

00:42:29,410 --> 00:42:28,010

blockchain and where's the intersection

766

00:42:31,750 --> 00:42:29,420

with AI and that really got me thinking

767

00:42:33,550 --> 00:42:31,760

you know about these buzzwords that are

768

00:42:35,230 --> 00:42:33,560

out there today which are no longer

769

00:42:36,760 --> 00:42:35,240

buzzwords like you said fridges are

770

00:42:38,349 --> 00:42:36,770

smart fridges now right there are

771

00:42:40,930 --> 00:42:38,359

thousands and thousands of those out

772

00:42:42,640 --> 00:42:40,940

there that can actually run code so now

773

00:42:44,890 --> 00:42:42,650

you can run code in many places that you

774

00:42:47,290 --> 00:42:44,900

couldn't before and that's good because

775

00:42:50,170 --> 00:42:47,300

it gives us lots of convenience but it's

776

00:42:52,930 --> 00:42:50,180

bad because we're suddenly reliant you

777

00:42:55,680 --> 00:42:52,940

know on this this interconnected machine

778

00:42:58,900 --> 00:42:55,690

world of you oh well I'm gonna get to

779

00:43:02,200 --> 00:42:58,910

the terms here in just a second

780

00:43:03,640 --> 00:43:02,210

but when I hear you say that this is I

781

00:43:06,370 --> 00:43:03,650

mean who really needs a smart

782

00:43:08,920 --> 00:43:06,380

refrigerator the answer is nobody right

783

00:43:11,710 --> 00:43:08,930

I mean there is absolutely no need for a

784

00:43:15,670 --> 00:43:11,720

smart refrigerator the reason why people

785

00:43:17,980 --> 00:43:15,680

have them is because you know you're

786

00:43:21,250 --> 00:43:17,990

competing with the Joneses do you

787

00:43:23,980 --> 00:43:21,260

remember when no refrigerators had the

788

00:43:26,320 --> 00:43:23,990

the water dispenser and the ice in the

789

00:43:28,120 --> 00:43:26,330

front right but then those came out I

790

00:43:31,030 --> 00:43:28,130

remember right now everybody's got to

791

00:43:34,810 --> 00:43:31,040

have one and so I look at it that way

792

00:43:37,420 --> 00:43:34,820

everybody wants to have a 12 by 14 inch

793

00:43:41,320 --> 00:43:37,430

display in front of the refrigerator

794

00:43:45,210 --> 00:43:41,330

they don't need it but that that's part

795

00:43:48,220 --> 00:43:45,220

of the problem nobody needs a you know a

796

00:43:50,740 --> 00:43:48,230

razor or a toothbrush or a bathroom

797

00:43:53,920 --> 00:43:50,750

mirror connected to the Internet you

798

00:43:55,480 --> 00:43:53,930

don't right and eventually that the

799

00:43:58,120 --> 00:43:55,490

manufacturers are only gonna be

800

00:44:00,400 --> 00:43:58,130

producing that dries versions I mean

801
00:44:02,680 --> 00:44:00,410
with like with TVs I mean you take an

802
00:44:04,960 --> 00:44:02,690
old CRT TV and you can't even connect

803
00:44:08,590 --> 00:44:04,970
you know either a DVD player or a

804
00:44:10,150 --> 00:44:08,600
digital signal to the old TVs right so

805
00:44:12,010 --> 00:44:10,160
pretty soon they won't even work anymore

806
00:44:14,109 --> 00:44:12,020
and that's because the manufacturers are

807
00:44:15,580 --> 00:44:14,119
constantly upgrading what's there so so

808
00:44:17,680 --> 00:44:15,590
I hear you and I agree with you that

809
00:44:19,599 --> 00:44:17,690
that's happening yeah and the only way

810
00:44:21,550 --> 00:44:19,609
to get people to buy new bathroom

811
00:44:23,299 --> 00:44:21,560
mirrors that they would never replace in

812
00:44:27,739 --> 00:44:23,309
their house for 50 years

813
00:44:30,709 --> 00:44:27,749

has put a chip in it now you know and so

814

00:44:33,859 --> 00:44:30,719

that all manufacturers are looking at

815

00:44:36,799 --> 00:44:33,869

just that right how do we get a chip

816

00:44:40,130 --> 00:44:36,809

into our products no matter what the

817

00:44:45,699 --> 00:44:40,140

product is you know to typify it and get

818

00:44:48,769 --> 00:44:45,709

it on the IOT and and I understand

819

00:44:50,930 --> 00:44:48,779

manufacturing and capitalism and and

820

00:44:53,689 --> 00:44:50,940

markets I totally get that and you've

821

00:44:56,059 --> 00:44:53,699

got to sell new product how do you do it

822

00:45:00,140 --> 00:44:56,069

well you create the next thing and

823

00:45:04,069 --> 00:45:00,150

certainly the IOT has done just that

824

00:45:10,489 --> 00:45:04,079

let's go to these terms here let's go

825

00:45:13,309 --> 00:45:10,499

with first off Riza's formula is ml plus

826

00:45:15,949 --> 00:45:13,319

blockchain + io t + drones equals Skynet

827

00:45:20,269 --> 00:45:15,959

let's start at the front and let's go

828

00:45:23,479 --> 00:45:20,279

with ml what is ml okay so ml is

829

00:45:26,059 --> 00:45:23,489

shorthand for machine learning right and

830

00:45:28,279 --> 00:45:26,069

so that's why you know the AI within the

831

00:45:30,410 --> 00:45:28,289

last few years has gotten more

832

00:45:32,900 --> 00:45:30,420

sophisticated than the AI we used to

833

00:45:34,430 --> 00:45:32,910

have you know back in the 80s and 90s I

834

00:45:36,529 --> 00:45:34,440

remember when you know when I was in

835

00:45:39,049 --> 00:45:36,539

high school in the 80s reading about how

836

00:45:42,079 --> 00:45:39,059

the Japanese were going to have AI that

837

00:45:43,910 --> 00:45:42,089

was as good as a human by the end of the

838

00:45:45,079 --> 00:45:43,920

decade that decade that was the 80s

839

00:45:47,930 --> 00:45:45,089

right and of course that didn't happen

840

00:45:50,599 --> 00:45:47,940

right so there was a whole first wave of

841

00:45:52,819 --> 00:45:50,609

AI which was based on rules and

842

00:45:54,079 --> 00:45:52,829

heuristics and code and they had to try

843

00:45:56,029 --> 00:45:54,089

to figure out what the rules were and

844

00:45:58,880 --> 00:45:56,039

that proved to be pretty difficult and

845

00:46:00,949 --> 00:45:58,890

so you know machine learning refers to

846

00:46:04,699 --> 00:46:00,959

the idea that the software the computer

847

00:46:07,339 --> 00:46:04,709

program can learn based upon data that

848

00:46:09,049 --> 00:46:07,349

we give it and so you know this started

849

00:46:11,689 --> 00:46:09,059

with neural networks simple neural

850

00:46:13,249 --> 00:46:11,699

networks which we're trying to emulate

851
00:46:15,170 --> 00:46:13,259
what happens inside the brain and you

852
00:46:16,849 --> 00:46:15,180
would feed it a bunch of data like for

853
00:46:19,099 --> 00:46:16,859
handwriting you would feed it a bunch of

854
00:46:22,609 --> 00:46:19,109
examples of people writing the letter T

855
00:46:26,989 --> 00:46:22,619
in cursive or you know in non cursive or

856
00:46:29,749 --> 00:46:26,999
or you know from a typed paper and then

857
00:46:31,849 --> 00:46:29,759
the machine would learn based upon the

858
00:46:34,699 --> 00:46:31,859
input you said this is a T this is an a

859
00:46:36,630 --> 00:46:34,709
this is a B and eventually you know

860
00:46:38,069 --> 00:46:36,640
handwriting recognition got pretty good

861
00:46:40,440 --> 00:46:38,079
still not perfect but it's way better

862
00:46:43,829 --> 00:46:40,450
now than it was before so is this idea

863
00:46:45,450 --> 00:46:43,839

that machines can learn based on data

864

00:46:48,660 --> 00:46:45,460

that you provide it that's really what

865

00:46:51,870 --> 00:46:48,670

ml is all about yeah so when you and I

866

00:46:54,120 --> 00:46:51,880

remember doing that with and I forget

867

00:46:55,529 --> 00:46:54,130

those little assistants

868

00:47:01,319 --> 00:46:55,539

what were they called those little

869

00:47:04,680 --> 00:47:01,329

digital assistants like the what were

870

00:47:10,470 --> 00:47:04,690

those called and there were Newton was

871

00:47:12,750 --> 00:47:10,480

one how quickly we forget

872

00:47:16,710 --> 00:47:12,760

but anyway where you had to write you

873

00:47:18,950 --> 00:47:16,720

know letters in and it would learn your

874

00:47:20,819 --> 00:47:18,960

handwriting so that's a machine learning

875

00:47:23,430 --> 00:47:20,829

yeah so that was sort of the beginning

876

00:47:26,220 --> 00:47:23,440

of machine learning palm power days Palm

877

00:47:28,470 --> 00:47:26,230

Pilot Palm Pilots Palm Pilot that's it

878

00:47:30,059 --> 00:47:28,480

yeah there you go the Palm Pilots right

879

00:47:31,890 --> 00:47:30,069

and it had different ways to write

880

00:47:34,019 --> 00:47:31,900

different letters so that it would be

881

00:47:36,210 --> 00:47:34,029

easy for the machine to recognize it so

882

00:47:39,240 --> 00:47:36,220

now a machine learning is being used for

883

00:47:41,819 --> 00:47:39,250

facial recognition it's being used for

884

00:47:43,740 --> 00:47:41,829

you know self-driving cars we're gonna

885

00:47:46,349 --> 00:47:43,750

talk a lot about that because autonomous

886

00:47:48,299 --> 00:47:46,359

cars are really a precursor to lots of

887

00:47:50,009 --> 00:47:48,309

other autonomous things but they feed

888

00:47:53,009 --> 00:47:50,019

images of the real world

889

00:47:54,390 --> 00:47:53,019

backed up by humans so you know when

890

00:47:56,400 --> 00:47:54,400

you're on the internet and you get these

891

00:47:59,039 --> 00:47:56,410

the CAPTCHAs and they give you these

892

00:48:00,509 --> 00:47:59,049

pictures now that's a you know which of

893

00:48:02,249 --> 00:48:00,519

these has a car in it which of these

894

00:48:06,569 --> 00:48:02,259

pictures or which of these pictures has

895

00:48:08,400 --> 00:48:06,579

a sign in it well some of those are data

896

00:48:09,960 --> 00:48:08,410

that's already known to them and they

897

00:48:12,660 --> 00:48:09,970

just want to verify that you're a human

898

00:48:14,339 --> 00:48:12,670

not a robot and some of those are new

899

00:48:16,829 --> 00:48:14,349

pictures that they haven't yet

900

00:48:20,190 --> 00:48:16,839

classified and they want the humans to

901
00:48:22,230 --> 00:48:20,200
say whether it's a sign or a car so they

902
00:48:23,910 --> 00:48:22,240
can feed it to the AI and test if the AI

903
00:48:26,190 --> 00:48:23,920
is actually working or the machine

904
00:48:29,160 --> 00:48:26,200
learning is working correctly and that

905
00:48:30,569 --> 00:48:29,170
scares the crap out of me yeah so every

906
00:48:32,849 --> 00:48:30,579
time you fill out one of the hosts like

907
00:48:34,440 --> 00:48:32,859
two of those are like new images and the

908
00:48:38,069 --> 00:48:34,450
other eight are old images and so

909
00:48:41,430 --> 00:48:38,079
they're using you know human feedback as

910
00:48:44,249 --> 00:48:41,440
a way to then feed the AI you know and

911
00:48:47,269 --> 00:48:44,259
the machine learning you know in back at

912
00:48:50,100 --> 00:48:47,279
the house in my garage I probably have

913
00:48:54,790 --> 00:48:50,110

three Palm Pilots

914

00:48:58,260 --> 00:48:54,800

just thinking about that man okay now of

915

00:49:01,180 --> 00:48:58,270

course now we have the blockchain and

916

00:49:03,280 --> 00:49:01,190

give us your short version of what the

917

00:49:05,820 --> 00:49:03,290

blockchain is we discussed it a lot here

918

00:49:08,590 --> 00:49:05,830

on the show but you would probably

919

00:49:10,060 --> 00:49:08,600

simplify it for everybody so they can

920

00:49:12,880 --> 00:49:10,070

understand what the blockchain is what

921

00:49:14,860 --> 00:49:12,890

is blockchain yeah so for the purposes

922

00:49:17,080 --> 00:49:14,870

of our discussion tonight and we're

923

00:49:18,730 --> 00:49:17,090

really concerned about one aspect one or

924

00:49:21,130 --> 00:49:18,740

two aspects of the blockchain which is

925

00:49:24,700 --> 00:49:21,140

that a blockchain is a series of

926
00:49:28,000 --> 00:49:24,710
computers around the world that are all

927
00:49:30,220 --> 00:49:28,010
agreeing on something all right so with

928
00:49:32,230 --> 00:49:30,230
Bitcoin they're agreeing on who

929
00:49:34,480 --> 00:49:32,240
transferred the Bitcoin where so the

930
00:49:36,670 --> 00:49:34,490
blockchain is a long list of everybody's

931
00:49:39,070 --> 00:49:36,680
transactions right but it's the

932
00:49:40,390 --> 00:49:39,080
peer-to-peer component that's really

933
00:49:43,540 --> 00:49:40,400
important for our discussion tonight

934
00:49:45,430 --> 00:49:43,550
because there's no one central machine

935
00:49:47,530 --> 00:49:45,440
saying like for example with Bank of

936
00:49:50,080 --> 00:49:47,540
America you have to go to their server

937
00:49:53,170 --> 00:49:50,090
their mainframe keeps track in their

938
00:49:55,960 --> 00:49:53,180

database of the of the official amount

939

00:49:57,610 --> 00:49:55,970

in anybody's give an account assuming

940

00:50:00,400 --> 00:49:57,620

there's no funny business going on like

941

00:50:02,650 --> 00:50:00,410

there was with Wells Fargo but in the

942

00:50:05,140 --> 00:50:02,660

blockchain no one machine has that

943

00:50:07,660 --> 00:50:05,150

central database so all the machines are

944

00:50:09,340 --> 00:50:07,670

kind of processing at the same time now

945

00:50:10,870 --> 00:50:09,350

the second thing that they do and this

946

00:50:14,950 --> 00:50:10,880

is kind of important for tonight is they

947

00:50:16,480 --> 00:50:14,960

they also run code so for example many

948

00:50:19,090 --> 00:50:16,490

of your listeners may have heard of not

949

00:50:20,800 --> 00:50:19,100

just Bitcoin but aetherium which is the

950

00:50:23,800 --> 00:50:20,810

second biggest cryptocurrency and

951
00:50:25,510 --> 00:50:23,810
blockchain out there and the reason if

952
00:50:28,060 --> 00:50:25,520
there m1 was invented that it's inventor

953
00:50:29,920 --> 00:50:28,070
of italic you know he wanted to write

954
00:50:31,060 --> 00:50:29,930
more code in the Bitcoin blockchain and

955
00:50:32,320 --> 00:50:31,070
he really couldn't so he said let's

956
00:50:34,060 --> 00:50:32,330
create this new blockchain called a

957
00:50:36,220 --> 00:50:34,070
cerium and I ought to write a bunch of

958
00:50:38,080 --> 00:50:36,230
code in there called smart contracts and

959
00:50:39,370 --> 00:50:38,090
so that's what's relevant for our

960
00:50:42,790 --> 00:50:39,380
discussion tonight is the blockchain

961
00:50:44,740 --> 00:50:42,800
provides a way for lots of computers

962
00:50:47,020 --> 00:50:44,750
around the world to be running the exact

963
00:50:48,990 --> 00:50:47,030

same code and that's where you can't

964

00:50:54,700 --> 00:50:49,000

just shut it off with any one computer

965

00:50:56,470 --> 00:50:54,710

very interesting so it's alive yep it's

966

00:50:57,880 --> 00:50:56,480

alive in a way right yeah as long as

967

00:51:01,329 --> 00:50:57,890

there are servers out there that have

968

00:51:06,519 --> 00:51:01,339

the software and it also helps for

969

00:51:08,950 --> 00:51:06,529

or nearly prevents fraud right because

970

00:51:11,829 --> 00:51:08,960

the idea is that since you have so many

971

00:51:13,599 --> 00:51:11,839

different machines agreeing you know you

972

00:51:17,799 --> 00:51:13,609

could hack one of those machines but

973

00:51:19,269 --> 00:51:17,809

that won't you know they won't impact

974

00:51:21,880 --> 00:51:19,279

the overall process so you'd have to

975

00:51:25,660 --> 00:51:21,890

hack 51% of the machines you would have

976
00:51:28,359 --> 00:51:25,670
to have 51% and the other before you if

977
00:51:31,079 --> 00:51:28,369
you got through and hacked one the

978
00:51:33,549 --> 00:51:31,089
others would override that quickly

979
00:51:36,579 --> 00:51:33,559
exactly they're conscious I checked the

980
00:51:37,959 --> 00:51:36,589
longest chain right even if you hack 51%

981
00:51:39,599 --> 00:51:37,969
you might be able to say okay I'm

982
00:51:42,430 --> 00:51:39,609
creating a new block in the blockchain

983
00:51:44,109 --> 00:51:42,440
here but you're blocking me if you went

984
00:51:45,759 --> 00:51:44,119
back and tried to take somebody else's

985
00:51:47,529 --> 00:51:45,769
Bitcoin yep long ago you'd have to catch

986
00:51:49,239 --> 00:51:47,539
up because the chain has already been

987
00:51:50,620 --> 00:51:49,249
processed by all these computers along

988
00:51:52,660 --> 00:51:50,630

the way so it is possible to hack it

989

00:51:54,640 --> 00:51:52,670

it's very difficult it is it is and

990

00:51:57,339 --> 00:51:54,650

they're constantly updating constantly

991

00:51:58,959 --> 00:51:57,349

and everything is time-stamped too as

992

00:52:02,680 --> 00:51:58,969

well so they go back to see when the

993

00:52:04,450 --> 00:52:02,690

error occurred exactly yep and that's

994

00:52:05,739 --> 00:52:04,460

happened in the history of Bitcoin where

995

00:52:08,319 --> 00:52:05,749

the foundation had to kind of agree

996

00:52:09,969 --> 00:52:08,329

before the change forks every now and

997

00:52:11,049 --> 00:52:09,979

then you'll hear about Forks on the

998

00:52:12,400 --> 00:52:11,059

chain we won't get into that too much

999

00:52:16,690 --> 00:52:12,410

tonight since we're concerned more about

1000

00:52:19,239 --> 00:52:16,700

this peer-to-peer aspect one and two the

1001
00:52:21,099 --> 00:52:19,249
ability to run code across the peers

1002
00:52:25,630 --> 00:52:21,109
that's why it's included in the equation

1003
00:52:28,539 --> 00:52:25,640
now now we have the IOT which is quickly

1004
00:52:30,190 --> 00:52:28,549
becoming one of the most popular terms

1005
00:52:33,519 --> 00:52:30,200
on planet Earth

1006
00:52:36,039 --> 00:52:33,529
what is IOT so IOT stands for the

1007
00:52:37,269 --> 00:52:36,049
Internet of Things right and that is

1008
00:52:39,370 --> 00:52:37,279
pretty much what you were talking about

1009
00:52:41,259 --> 00:52:39,380
with the smart refrigerators but it's

1010
00:52:43,749 --> 00:52:41,269
not limited or refrigerators the idea is

1011
00:52:45,880 --> 00:52:43,759
that any physical device you know can

1012
00:52:48,880 --> 00:52:45,890
have a connection to the Internet which

1013
00:52:51,249 --> 00:52:48,890

means it can send data back to the

1014

00:52:54,130 --> 00:52:51,259

manufacturers database you can keep

1015

00:52:56,140 --> 00:52:54,140

track of what's going on you know you

1016

00:52:58,539 --> 00:52:56,150

have the cars connected to the Internet

1017

00:52:59,620 --> 00:52:58,549

you have all kinds of objects and

1018

00:53:01,749 --> 00:52:59,630

devices like you said eventually

1019

00:53:03,489 --> 00:53:01,759

toothbrushes connected to the Internet

1020

00:53:06,489 --> 00:53:03,499

all that data is being sent over the

1021

00:53:09,370 --> 00:53:06,499

internet somewhere but it provides a way

1022

00:53:12,670 --> 00:53:09,380

in to physical devices that wasn't there

1023

00:53:15,030 --> 00:53:12,680

before right even things like you know

1024

00:53:16,900 --> 00:53:15,040

to unlock a door right

1025

00:53:18,820 --> 00:53:16,910

office you've probably seen this some

1026
00:53:21,400 --> 00:53:18,830
office spaces now you bring up your app

1027
00:53:21,880 --> 00:53:21,410
on your smartphone you say unlock the

1028
00:53:24,010 --> 00:53:21,890
door

1029
00:53:26,380 --> 00:53:24,020
rather than using a physical key anymore

1030
00:53:27,850 --> 00:53:26,390
right so that's is sending a message

1031
00:53:29,620 --> 00:53:27,860
through the internet to some server

1032
00:53:32,650 --> 00:53:29,630
which is sending the message to that

1033
00:53:34,540 --> 00:53:32,660
door which means that that door is also

1034
00:53:36,400 --> 00:53:34,550
part of the Internet of Things because

1035
00:53:38,890 --> 00:53:36,410
it's now connected and it has some code

1036
00:53:40,780 --> 00:53:38,900
that is running on it yeah a smart house

1037
00:53:44,500 --> 00:53:40,790
is scary when you think about your

1038
00:53:48,610 --> 00:53:44,510

thermostat your refrigerator your your

1039

00:53:54,370 --> 00:53:48,620

garage door your lights your television

1040

00:53:58,480 --> 00:53:54,380

and everything in your room become a

1041

00:54:00,100 --> 00:53:58,490

huge a huge much everything is becomes a

1042

00:54:01,840 --> 00:54:00,110

part of the Internet of Things and smart

1043

00:54:03,850 --> 00:54:01,850

homes is one aspect of that now there's

1044

00:54:05,200 --> 00:54:03,860

some convenience is there right when

1045

00:54:07,150 --> 00:54:05,210

you're traveling you can turn off your

1046

00:54:08,680 --> 00:54:07,160

lights you can turn them on you can see

1047

00:54:11,260 --> 00:54:08,690

who's at your door so there are some

1048

00:54:13,000 --> 00:54:11,270

positives there but it's this fact that

1049

00:54:15,100 --> 00:54:13,010

code is running everywhere

1050

00:54:17,140 --> 00:54:15,110

is why it's part of this equation enough

1051

00:54:20,050 --> 00:54:17,150

ml plus blockchain plus I of T plus

1052

00:54:23,260 --> 00:54:20,060

drones equals Skynet three years ago I

1053

00:54:27,820 --> 00:54:23,270

did I did one of my rant and I said you

1054

00:54:30,670 --> 00:54:27,830

know what would it be like if your

1055

00:54:33,100 --> 00:54:30,680

bathroom mirror you walk up and you turn

1056

00:54:35,200 --> 00:54:33,110

on the TV it's inside of your mirror and

1057

00:54:38,140 --> 00:54:35,210

you're watching you know the news the

1058

00:54:40,180 --> 00:54:38,150

morning show and you're doing that and

1059

00:54:44,230 --> 00:54:40,190

the mirror is talking to you telling you

1060

00:54:47,400 --> 00:54:44,240

you need to shave today and and you get

1061

00:54:51,040 --> 00:54:47,410

down and you pick up your electric razor

1062

00:54:52,960 --> 00:54:51,050

and it needs to be charged and your

1063

00:54:54,610 --> 00:54:52,970

mirror is telling you to charge it right

1064

00:54:57,550 --> 00:54:54,620

and you're going through all it kind of

1065

00:54:59,530 --> 00:54:57,560

sounds cool at first but I said you

1066

00:55:02,260 --> 00:54:59,540

don't know who's now looking at you in

1067

00:55:06,700 --> 00:55:02,270

the mirror number one and number two you

1068

00:55:09,010 --> 00:55:06,710

are now completely connected to somebody

1069

00:55:10,870 --> 00:55:09,020

else's software that is now monitoring

1070

00:55:13,750 --> 00:55:10,880

everything about your daily life so I

1071

00:55:15,250 --> 00:55:13,760

did this whole thing and the next day my

1072

00:55:16,660 --> 00:55:15,260

phone rings I pick it up it's a friend

1073

00:55:18,850 --> 00:55:16,670

of mine here in Southern California goes

1074

00:55:21,280 --> 00:55:18,860

dude I heard your show last night I said

1075

00:55:22,720 --> 00:55:21,290

really you listen to because I do and I

1076
00:55:25,390 --> 00:55:22,730
was listening guess what I'm doing right

1077
00:55:27,670 --> 00:55:25,400
now I said what because I'm writing code

1078
00:55:28,120 --> 00:55:27,680
for a company here in Southern

1079
00:55:31,000 --> 00:55:28,130
California

1080
00:55:35,230 --> 00:55:31,010
or Nia for bathroom mirrors and

1081
00:55:36,670 --> 00:55:35,240
toothbrushes because dude we are doing

1082
00:55:38,620 --> 00:55:36,680
it right now we're bringing it to market

1083
00:55:40,180 --> 00:55:38,630
and that was three years ago

1084
00:55:43,360 --> 00:55:40,190
and I was just letting my imagination

1085
00:55:46,420 --> 00:55:43,370
run I remember Rita after that

1086
00:55:49,270 --> 00:55:46,430
Riz she literally came up to me because

1087
00:55:52,390 --> 00:55:49,280
do you really think come on Jimmy you

1088
00:55:55,120 --> 00:55:52,400

know you're scared I said no it's I'm

1089

00:55:57,190 --> 00:55:55,130

what I'm afraid of is hackers yeah

1090

00:56:01,090 --> 00:55:57,200

that's what I'm afraid of if you go and

1091

00:56:02,740 --> 00:56:01,100

and if if a hacker really wanted because

1092

00:56:04,360 --> 00:56:02,750

these are all running on Android right

1093

00:56:07,300 --> 00:56:04,370

most of the Internet of Things is

1094

00:56:11,920 --> 00:56:07,310

running on Android and if a hacker out

1095

00:56:14,490 --> 00:56:11,930

there is really wanted to get those \$300

1096

00:56:19,780 --> 00:56:14,500

ransoms right you don't hack computers

1097

00:56:23,080 --> 00:56:19,790

hack the United States food supply pack

1098

00:56:27,820 --> 00:56:23,090

their refrigerators you'll get 300 bucks

1099

00:56:30,280 --> 00:56:27,830

a pop very quickly because that and just

1100

00:56:32,740 --> 00:56:30,290

think about that you know and that is

1101
00:56:34,510 --> 00:56:32,750
that is where we need to think about

1102
00:56:36,880 --> 00:56:34,520
cutting off the world and not

1103
00:56:38,830 --> 00:56:36,890
necessarily plugging in everywhere but

1104
00:56:41,830 --> 00:56:38,840
that's the Internet of Things I think

1105
00:56:44,620 --> 00:56:41,840
it's a dangerous zone too to continue

1106
00:56:46,120 --> 00:56:44,630
moving into I think quite recklessly

1107
00:56:48,940 --> 00:56:46,130
we're not we're not looking at the

1108
00:56:50,710 --> 00:56:48,950
implications I agree with you and I

1109
00:56:52,570 --> 00:56:50,720
think you know we're it's still a little

1110
00:56:54,850 --> 00:56:52,580
ways before all these things talk to

1111
00:56:56,590 --> 00:56:54,860
each other but the fact that they have

1112
00:56:59,590 --> 00:56:56,600
you know an android-based operating

1113
00:57:01,150 --> 00:56:59,600

system for example means that you know

1114

00:57:05,740 --> 00:57:01,160

anybody who knows that operating system

1115

00:57:08,110 --> 00:57:05,750

can figure out a way to get a code you

1116

00:57:11,140 --> 00:57:08,120

know on to those devices and you know I

1117

00:57:13,890 --> 00:57:11,150

I saw an app that somebody showed me

1118

00:57:17,320 --> 00:57:13,900

once that you know where he connected to

1119

00:57:19,840 --> 00:57:17,330

your local area network at somebody's

1120

00:57:22,180 --> 00:57:19,850

house and he said oh there's some

1121

00:57:23,470 --> 00:57:22,190

viruses on this and that on your Smart

1122

00:57:26,830 --> 00:57:23,480

TV on that that you don't even know

1123

00:57:29,620 --> 00:57:26,840

about so people are already you know

1124

00:57:31,330 --> 00:57:29,630

sending viruses to the internet of

1125

00:57:33,760 --> 00:57:31,340

things and usually you don't know about

1126

00:57:35,500 --> 00:57:33,770

it you don't know it's there unless you

1127

00:57:36,970 --> 00:57:35,510

have you know something that can scan

1128

00:57:39,580 --> 00:57:36,980

most virus software we have today is

1129

00:57:40,970 --> 00:57:39,590

built for scanning your computer not

1130

00:57:44,480 --> 00:57:40,980

your fridge right

1131

00:57:46,250 --> 00:57:44,490

right right and and it only takes you

1132

00:57:48,050 --> 00:57:46,260

know one bad actor out there it's all

1133

00:57:51,590 --> 00:57:48,060

easy to do they just have to have a

1134

00:57:53,060 --> 00:57:51,600

reason to do it or some spare time Rita

1135

00:57:55,160 --> 00:57:53,070

just tweeted I don't know if you saw

1136

00:57:59,710 --> 00:57:55,170

this where she goes what would a smart

1137

00:58:02,690 --> 00:57:59,720

toothbrush do in case of an AI rebellion

1138

00:58:07,130 --> 00:58:02,700

my reply back was I don't even need to

1139

00:58:08,960 --> 00:58:07,140

think about that other things that could

1140

00:58:11,300 --> 00:58:08,970

be problem at all I don't know if you

1141

00:58:13,820 --> 00:58:11,310

saw the and I think you did see the

1142

00:58:17,300 --> 00:58:13,830

x-files episode yes wouldn't your show

1143

00:58:19,370 --> 00:58:17,310

last time we had the Roomba yeah the

1144

00:58:21,230 --> 00:58:19,380

Roomba but they had the sushi chefs who

1145

00:58:23,720 --> 00:58:21,240

were robots yes because they didn't

1146

00:58:25,400 --> 00:58:23,730

leave a tip those robots were connecting

1147

00:58:27,890 --> 00:58:25,410

the central server which was connecting

1148

00:58:30,260 --> 00:58:27,900

to their autonomous driver for their

1149

00:58:31,940 --> 00:58:30,270

uber like cars back home right which was

1150

00:58:33,650 --> 00:58:31,950

they were then connecting to their doors

1151

00:58:35,720 --> 00:58:33,660

and locking the door and having the

1152

00:58:37,849 --> 00:58:35,730

Roomba attack them and then the drones

1153

00:58:40,310 --> 00:58:37,859

that were delivering the Amazon packages

1154

00:58:42,020 --> 00:58:40,320

you know we're starting to gang up on

1155

00:58:43,520 --> 00:58:42,030

them and you know we've got the

1156

00:58:45,080 --> 00:58:43,530

technology for that we're not very far

1157

00:58:47,690 --> 00:58:45,090

off from that I mean that could happen

1158

00:58:50,030 --> 00:58:47,700

soon it the AI that would do it all is

1159

00:58:51,890 --> 00:58:50,040

not quite there yet but the connections

1160

00:58:55,250 --> 00:58:51,900

are there yeah it's a scary scary

1161

00:58:57,380 --> 00:58:55,260

thought and we are right I mean we are

1162

00:58:59,450 --> 00:58:57,390

so close it's like lemmings to the sea

1163

00:59:02,900 --> 00:58:59,460

right we're all on the edge of the cliff

1164

00:59:05,330 --> 00:59:02,910

right now taking a peek we're taking a

1165

00:59:07,130 --> 00:59:05,340

peek yeah it's good to have you know

1166

00:59:10,250 --> 00:59:07,140

some backup the other day you know I was

1167

00:59:11,810 --> 00:59:10,260

in San Francisco and we were trying to

1168

00:59:13,790 --> 00:59:11,820

call an uber and meanwhile there were

1169

00:59:15,080 --> 00:59:13,800

these cabs just driving right by us it's

1170

00:59:17,780 --> 00:59:15,090

like I had forgotten how to call a cab

1171

00:59:19,760 --> 00:59:17,790

because I'm so used to going into my

1172

00:59:20,960 --> 00:59:19,770

phone and getting a car to come to me

1173

00:59:22,370 --> 00:59:20,970

it's like oh the old-fashioned way of

1174

00:59:24,230 --> 00:59:22,380

holding out your hand actually still

1175

00:59:27,650 --> 00:59:24,240

works so sometimes we need to have

1176
00:59:31,970 --> 00:59:27,660
backup ways of doing things that you

1177
00:59:34,640 --> 00:59:31,980
forgot how to go analog right that's

1178
00:59:38,150 --> 00:59:34,650
funny all right and then of course we

1179
00:59:42,200 --> 00:59:38,160
have the next piece of your equation is

1180
00:59:44,990 --> 00:59:42,210
drones now we are I would love to hear

1181
00:59:48,560 --> 00:59:45,000
your definition of drones you can go

1182
00:59:51,500 --> 00:59:48,570
into any electronics store now any any

1183
00:59:53,660 --> 00:59:51,510
any store you walk in the front door and

1184
00:59:57,079 --> 00:59:53,670
that's what they've got stacked up do

1185
00:59:59,509 --> 00:59:57,089
drones are everywhere go to Fry's they I

1186
01:00:02,900 --> 00:59:59,519
don't know how many drones fry sells in

1187
01:00:05,660 --> 01:00:02,910
a day but if their displays of drones

1188
01:00:09,559 --> 01:00:05,670

are any indication it just it's got to

1189

01:00:12,109 --> 01:00:09,569

be just tons its ballooning and it's a

1190

01:00:13,609 --> 01:00:12,119

pretty big area right now and I know

1191

01:00:15,950 --> 01:00:13,619

that a lot of venture capital investment

1192

01:00:18,079 --> 01:00:15,960

has gone into that area because more and

1193

01:00:19,700 --> 01:00:18,089

more people are using drones now most of

1194

01:00:21,049 --> 01:00:19,710

the drones are like the quad copters

1195

01:00:23,539 --> 01:00:21,059

right where they've got the four little

1196

01:00:26,420 --> 01:00:23,549

propellers right and you can do that you

1197

01:00:28,880 --> 01:00:26,430

know for a small size or a big size and

1198

01:00:30,470 --> 01:00:28,890

so drones by themselves aren't that

1199

01:00:32,990 --> 01:00:30,480

dangerous but if you look at the drones

1200

01:00:34,430 --> 01:00:33,000

we use in the military you know

1201

01:00:36,230 --> 01:00:34,440

particularly as we're bombing in like

1202

01:00:39,170 --> 01:00:36,240

Afghanistan or Pakistan which is

1203

01:00:40,670 --> 01:00:39,180

actually where I was born you've got

1204

01:00:42,650 --> 01:00:40,680

these drones that look a little bit

1205

01:00:45,019 --> 01:00:42,660

different from the drones that Frye's is

1206

01:00:48,259 --> 01:00:45,029

selling those drones look more like

1207

01:00:49,370 --> 01:00:48,269

little airplanes where's the drones you

1208

01:00:50,839 --> 01:00:49,380

know we're getting are like these little

1209

01:00:53,809 --> 01:00:50,849

you know quad copters or little

1210

01:00:56,870 --> 01:00:53,819

helicopters and so drones become

1211

01:01:00,019 --> 01:00:56,880

dangerous when they get combined with

1212

01:01:02,180 --> 01:01:00,029

weapons right so weaponized drones it's

1213

01:01:03,859 --> 01:01:02,190

the real fear here and if you look at

1214

01:01:06,740 --> 01:01:03,869

some of the drones today and you know I

1215

01:01:09,170 --> 01:01:06,750

used at the end of this formula I say

1216

01:01:10,999 --> 01:01:09,180

equal Skynet as you may know I'm a big

1217

01:01:12,200 --> 01:01:11,009

fan of the Terminator movies mm-hmm and

1218

01:01:15,049 --> 01:01:12,210

you know they have these things called

1219

01:01:16,519 --> 01:01:15,059

HKS or hunter killers and you look at

1220

01:01:18,349 --> 01:01:16,529

them and they're just like they start

1221

01:01:19,549 --> 01:01:18,359

off as little drones and then they

1222

01:01:22,339 --> 01:01:19,559

become more and more sophisticated

1223

01:01:24,140 --> 01:01:22,349

drones that can go up and down and can

1224

01:01:26,359 --> 01:01:24,150

fly anywhere so once you combine drones

1225

01:01:28,460 --> 01:01:26,369

with weapons now we're in dangerous

1226

01:01:29,660 --> 01:01:28,470

territory we're close to unlocking you

1227

01:01:31,910 --> 01:01:29,670

know one of these gates that I talked

1228

01:01:33,740 --> 01:01:31,920

about I gotta take a break right here so

1229

01:01:35,809 --> 01:01:33,750

let's get the break out and then we'll

1230

01:01:38,150 --> 01:01:35,819

continue the discussion when we come

1231

01:01:40,579 --> 01:01:38,160

back our guest tonight Risberg

1232

01:01:43,609 --> 01:01:40,589

and we're discussing his latest article

1233

01:01:47,470 --> 01:01:43,619

the road to killer AI ml plus blockchain

1234

01:01:51,349 --> 01:01:47,480

plus io t plus drones equals Skynet

1235

01:01:54,200 --> 01:01:51,359

Riz Burk unbelievable article you can

1236

01:01:56,299 --> 01:01:54,210

check it out over at hacker noon dot-com

1237

01:01:57,050 --> 01:01:56,309

army o CB church this is fade to black

1238

01:02:18,079 --> 01:01:57,060

stay with us

1239

01:02:22,049 --> 01:02:19,920

this is fade to black

1240

01:02:25,740 --> 01:02:22,059

with Jimmy Church on the game changer

1241

01:02:30,210 --> 01:02:25,750

radio network and kgr a the global radio

1242

01:02:33,089 --> 01:02:30,220

alliance this is kg are a digital

1243

01:02:36,510 --> 01:02:33,099

broadcasting station Salt Lake City Utah

1244

01:02:38,609 --> 01:02:36,520

Van Buren Arkansas does your basement or

1245

01:02:40,380 --> 01:02:38,619

crawlspace have a damp musty smell well

1246

01:02:42,540 --> 01:02:40,390

watch out that's a sign of too much

1247

01:02:44,370 --> 01:02:42,550

moisture and not enough ventilation and

1248

01:02:46,500 --> 01:02:44,380

that can mean increased mold growth and

1249

01:02:48,750 --> 01:02:46,510

the build-up of harmful toxins and gases

1250

01:02:50,910 --> 01:02:48,760

don't bother with a dehumidifier it just

1251

01:02:52,740 --> 01:02:50,920

circulates the same unhealthy air now

1252

01:02:54,569 --> 01:02:52,750

there's a better way to remove these

1253

01:02:56,970 --> 01:02:54,579

dangers and odors it's with the

1254

01:02:58,770 --> 01:02:56,980

computerized wave moisture control unit

1255

01:03:00,390 --> 01:02:58,780

that reduces moisture and expels

1256

01:03:02,400 --> 01:03:00,400

pollutants we replaced our old

1257

01:03:04,680 --> 01:03:02,410

dehumidifier with the wave unit and in

1258

01:03:07,079 --> 01:03:04,690

only three weeks our basement is dry and

1259

01:03:09,030 --> 01:03:07,089

the musty smell is gone wave units

1260

01:03:11,460 --> 01:03:09,040

require no maintenance no buckets of

1261

01:03:13,380 --> 01:03:11,470

water or filters and costs only pennies

1262

01:03:15,180 --> 01:03:13,390

a day to run breathe better live

1263

01:03:17,579 --> 01:03:15,190

healthier with an affordable no

1264

01:03:19,950 --> 01:03:17,589

maintenance wave unit call eight eight

1265

01:03:23,280 --> 01:03:19,960

eight seven one seven way eight eight

1266

01:03:29,730 --> 01:03:23,290

eight seven one seven wave or visit dry

1267

01:03:42,120 --> 01:03:31,860

home solutions

1268

01:03:46,600 --> 01:03:44,740

hi this is Ray sobs here reppin the

1269

01:03:49,600 --> 01:03:46,610

planet and you're listening to my good

1270

01:03:52,180 --> 01:03:49,610

friend Jimmy Church fade to black

1271

01:03:56,740 --> 01:03:52,190

on the GameChanger network and the kgr a

1272

01:03:58,870 --> 01:03:56,750

digital broadcast station this is Toby

1273

01:04:21,820 --> 01:03:58,880

KeBell you're listening to Jimmy Church

1274

01:04:25,960 --> 01:04:21,830

radio calm revolution ancient life oil

1275

01:04:28,570 --> 01:04:25,970

life changing the real oil CBD is truly

1276

01:04:30,910 --> 01:04:28,580

ancient life oil from the source this

1277

01:04:33,910 --> 01:04:30,920

oil has no psychoactive effect and is

1278

01:04:36,340 --> 01:04:33,920

also legal in all 50 states when you're

1279

01:04:38,710 --> 01:04:36,350

healthy you're happy the truth about

1280

01:04:41,920 --> 01:04:38,720

this wonderful plant is that it wants to

1281

01:04:45,070 --> 01:04:41,930

give back to mankind life longevity and

1282

01:04:47,890 --> 01:04:45,080

happiness ancient life oil are golden

1283

01:04:50,260 --> 01:04:47,900

gray all organic non-gmo and infused

1284

01:04:53,020 --> 01:04:50,270

with high-quality liquid coconut oil

1285

01:04:56,380 --> 01:04:53,030

it's simple just go to ancient life oil

1286

01:05:00,220 --> 01:04:56,390

dot-com today that's ancient life oil

1287

01:05:04,690 --> 01:05:00,230

dot-com the best purest organic and

1288

01:05:06,250 --> 01:05:04,700

non-gmo CBD in the world gobekli tepe

1289

01:05:07,630 --> 01:05:06,260

the statements made regarding these

1290

01:05:08,740 --> 01:05:07,640

products have not been evaluated by the

1291

01:05:09,970 --> 01:05:08,750

Food and Drug Administration these

1292

01:05:11,890 --> 01:05:09,980

products are not intended to diagnose

1293

01:05:13,120 --> 01:05:11,900

treat cure or prevent any disease please

1294

01:05:14,620 --> 01:05:13,130

consult your health care professional

1295

01:05:16,420 --> 01:05:14,630

about potential interactions or other

1296

01:05:18,220 --> 01:05:16,430

possible complications before using any

1297

01:05:19,930 --> 01:05:18,230

product this is Micah Hanks of the

1298

01:05:22,420 --> 01:05:19,940

graylien report and you're listening to

1299

01:05:24,250 --> 01:05:22,430

Jimmy church on fade to black across the

1300

01:05:26,890 --> 01:05:24,260

globe on the GameChanger radio network

1301
01:05:27,740 --> 01:05:26,900
and the one and only kgr a radio the

1302
01:05:31,960 --> 01:05:27,750
planet

1303
01:05:32,570 --> 01:05:31,970
[Music]

1304
01:05:48,400 --> 01:05:32,580
[Applause]

1305
01:05:50,690 --> 01:05:48,410
[Music]

1306
01:05:54,339 --> 01:05:50,700
welcome back pain to black I'm your host

1307
01:05:58,400 --> 01:05:54,349
Jimmy church tonight rizz Burke is here

1308
01:06:01,489 --> 01:05:58,410
now this article that he wrote is called

1309
01:06:05,779 --> 01:06:01,499
the road to killer AI ml plus blockchain

1310
01:06:08,930 --> 01:06:05,789
+ io t + drones equals a Skynet now it's

1311
01:06:11,890 --> 01:06:08,940
an important it's an important article

1312
01:06:14,719 --> 01:06:11,900
because I think all of us can step back

1313
01:06:18,009 --> 01:06:14,729

absorb this I don't think it's there to

1314

01:06:20,599 --> 01:06:18,019

scare us but certainly make us aware of

1315

01:06:23,449 --> 01:06:20,609

how this technology has crept into

1316

01:06:25,940 --> 01:06:23,459

every aspect of our lives and and I

1317

01:06:28,670 --> 01:06:25,950

don't think we've quite noticed the

1318

01:06:33,949 --> 01:06:28,680

intrusion but back to this drone thing

1319

01:06:36,859 --> 01:06:33,959

Burke what R is for sculptures Burke

1320

01:06:39,559 --> 01:06:36,869

Riz is is this somebody that's you know

1321

01:06:46,459 --> 01:06:39,569

graduated from Stanford and MIT and I

1322

01:06:49,789 --> 01:06:46,469

just call them Burke yo Burke you know I

1323

01:06:53,539 --> 01:06:49,799

have so much respect for you and you are

1324

01:06:55,789 --> 01:06:53,549

free to call me Church is this I thought

1325

01:07:00,109 --> 01:06:55,799

to myself a couple of years ago and I

1326
01:07:03,019 --> 01:07:00,119
know that it's an easy polluted thought

1327
01:07:06,259 --> 01:07:03,029
to have but I have I have a few drones

1328
01:07:09,140 --> 01:07:06,269
ok I do I I have radio control cars and

1329
01:07:10,729 --> 01:07:09,150
helicopters and drones and and I did

1330
01:07:12,979 --> 01:07:10,739
that stuff they're fun and plus I can

1331
01:07:15,589 --> 01:07:12,989
terrorize my dogs with them which is is

1332
01:07:16,819 --> 01:07:15,599
that you know that's the bonus but I'm

1333
01:07:20,630 --> 01:07:16,829
sitting here looking at them and I

1334
01:07:24,199 --> 01:07:20,640
thought because one of my one of my

1335
01:07:29,019 --> 01:07:24,209
drones has a little cannon on it and the

1336
01:07:33,499 --> 01:07:29,029
cannon shoots these little tiny green

1337
01:07:34,999 --> 01:07:33,509
balls right little tiny green balls they

1338
01:07:37,400 --> 01:07:35,009

don't hunt you know they just you know

1339

01:07:38,989 --> 01:07:37,410

they just they cast through the air they

1340

01:07:42,559 --> 01:07:38,999

don't shoot in a straight line right

1341

01:07:45,549 --> 01:07:42,569

but anyway it's fun to use on your dog's

1342

01:07:48,680 --> 01:07:45,559

by anyway and I was thinking to myself

1343

01:07:52,910 --> 01:07:48,690

what would stop somebody from like

1344

01:07:55,099 --> 01:07:52,920

putting a Glock on a drone and figuring

1345

01:07:57,049 --> 01:07:55,109

out it's not it's you know and and with

1346

01:07:58,260 --> 01:07:57,059

a good remote control you've got all

1347

01:08:00,690 --> 01:07:58,270

kinds of a

1348

01:08:04,890 --> 01:08:00,700

additional commands that you can do and

1349

01:08:06,180 --> 01:08:04,900

you know her hook up a servo to it and

1350

01:08:07,650 --> 01:08:06,190

just hit the button and boom and start

1351

01:08:09,630 --> 01:08:07,660

pulling a trigger right and you've

1352

01:08:13,440 --> 01:08:09,640

already got the camera there in hi-def

1353

01:08:16,620 --> 01:08:13,450

and and right after that thought popped

1354

01:08:19,079 --> 01:08:16,630

in my head I see a video on YouTube

1355

01:08:21,930 --> 01:08:19,089

dude's got a Glock on a drone and he's

1356

01:08:27,750 --> 01:08:21,940

out on a target range with it firing off

1357

01:08:30,390 --> 01:08:27,760

this Glock now we talk about Isis okay I

1358

01:08:33,630 --> 01:08:30,400

get that but you can do it with whatever

1359

01:08:35,970 --> 01:08:33,640

you buy at Fry's and and that's that's a

1360

01:08:38,820 --> 01:08:35,980

scary scary thought and and to have it

1361

01:08:41,610 --> 01:08:38,830

taken over or maybe run by somebody else

1362

01:08:44,490 --> 01:08:41,620

you only need the germ of the idea to

1363

01:08:48,120 --> 01:08:44,500

have it run away with the crazies out

1364

01:08:51,360 --> 01:08:48,130

there well yeah that's true and you know

1365

01:08:53,430 --> 01:08:51,370

once the weapons are on the drones which

1366

01:08:55,380 --> 01:08:53,440

they are to a certain extent already and

1367

01:08:56,550 --> 01:08:55,390

and you said you saw that YouTube video

1368

01:08:59,030 --> 01:08:56,560

there's another YouTube video that's

1369

01:09:01,349 --> 01:08:59,040

pretty scary is by a berkeley professor

1370

01:09:03,660 --> 01:09:01,359

named Stuart Russell who's an AI

1371

01:09:06,360 --> 01:09:03,670

researcher and you know he created a

1372

01:09:08,340 --> 01:09:06,370

video called slaughter BOTS and he's

1373

01:09:09,450 --> 01:09:08,350

showing these little drones very small

1374

01:09:11,849 --> 01:09:09,460

drones just like the ones you buy at

1375

01:09:13,500 --> 01:09:11,859

Fry's but even smaller and he's

1376

01:09:15,780 --> 01:09:13,510

presenting it as if it's a company that

1377

01:09:17,370 --> 01:09:15,790

makes these right kind of like getting

1378

01:09:19,500 --> 01:09:17,380

back to the Terminator Cyberdyne systems

1379

01:09:23,640 --> 01:09:19,510

right if any of you have been to the

1380

01:09:25,769 --> 01:09:23,650

Universal Studios a terminator 2 exhibit

1381

01:09:27,660 --> 01:09:25,779

at down in Florida and I think they have

1382

01:09:29,010 --> 01:09:27,670

one in California now as well you know

1383

01:09:30,599 --> 01:09:29,020

you walked through the simulated

1384

01:09:32,280 --> 01:09:30,609

Cyberdyne systems and they show you all

1385

01:09:34,890 --> 01:09:32,290

their latest models of these killer

1386

01:09:37,079 --> 01:09:34,900

robots well this video was kind of like

1387

01:09:38,789 --> 01:09:37,089

that with these small drones and they

1388

01:09:40,289 --> 01:09:38,799

had some explosives on the drones and

1389

01:09:42,720 --> 01:09:40,299

you could see while he was talking the

1390

01:09:44,280 --> 01:09:42,730

camera from the drone had him as a

1391

01:09:45,630 --> 01:09:44,290

target and then later they showed a

1392

01:09:47,700 --> 01:09:45,640

target of something else in the drone

1393

01:09:49,200 --> 01:09:47,710

had an explosive device and it just went

1394

01:09:50,730 --> 01:09:49,210

and you know killed the dummy in this

1395

01:09:52,620 --> 01:09:50,740

case it was just a dummy but it was a

1396

01:09:56,400 --> 01:09:52,630

pretty scary video because we're not

1397

01:09:58,130 --> 01:09:56,410

that far from being able to do that and

1398

01:10:00,930 --> 01:09:58,140

if you're controlling it electronically

1399

01:10:04,500 --> 01:10:00,940

well then it can be hacked either by

1400

01:10:06,300 --> 01:10:04,510

hackers today or by an AI in the future

1401

01:10:08,340 --> 01:10:06,310

so anyone who's worried about you know

1402

01:10:11,700 --> 01:10:08,350

killer AI it's it's an interesting video

1403

01:10:14,610 --> 01:10:11,710

to see online with respect to drones

1404

01:10:16,560 --> 01:10:14,620

now let's go to let's start to break

1405

01:10:19,950 --> 01:10:16,570

this down now that we have the equation

1406

01:10:22,620 --> 01:10:19,960

oh oh of course Skynet now we're all

1407

01:10:24,840 --> 01:10:22,630

well no you know what whenever I say

1408

01:10:26,610 --> 01:10:24,850

we're all familiar with Skynet I'll see

1409

01:10:30,180 --> 01:10:26,620

the tweet come in I'll get an email what

1410

01:10:32,100 --> 01:10:30,190

is Skynet so let's let's just get keep

1411

01:10:37,070 --> 01:10:32,110

everybody up on top of this what is

1412

01:10:40,650 --> 01:10:37,080

Skynet well so Skynet is the killer AI

1413

01:10:43,470 --> 01:10:40,660

from the Terminator series of movies and

1414

01:10:44,970 --> 01:10:43,480

the idea is that there's a in this

1415

01:10:47,040 --> 01:10:44,980

fictional universe right

1416

01:10:51,060 --> 01:10:47,050

there's a company Cyberdyne systems

1417

01:10:54,000 --> 01:10:51,070

that's building AI and that AI becomes

1418

01:10:56,760 --> 01:10:54,010

self-aware at a certain point but before

1419

01:11:00,090 --> 01:10:56,770

it becomes self-aware the military uses

1420

01:11:02,880 --> 01:11:00,100

Skynet to replace pilots on planes and

1421

01:11:04,670 --> 01:11:02,890

all military missions and the efficiency

1422

01:11:06,959 --> 01:11:04,680

of the military missions goes way up

1423

01:11:10,350 --> 01:11:06,969

because theoretically the AI doesn't

1424

01:11:12,209 --> 01:11:10,360

make a mistake so that's all interesting

1425

01:11:14,430 --> 01:11:12,219

from the perspective of the military

1426

01:11:16,920 --> 01:11:14,440

initially but then Skynet becomes

1427

01:11:19,620 --> 01:11:16,930

self-aware and decides that the only way

1428

01:11:22,410 --> 01:11:19,630

for it to survive is to kill the humans

1429

01:11:24,660 --> 01:11:22,420

so it since it has connections into the

1430

01:11:27,440 --> 01:11:24,670

military system at that point it fires

1431

01:11:31,040 --> 01:11:27,450

our nuclear weapons against ourselves

1432

01:11:33,840 --> 01:11:31,050

and then it also creates actual robots

1433

01:11:35,400 --> 01:11:33,850

physical robots that it can use like the

1434

01:11:36,979 --> 01:11:35,410

Terminator which is the character that

1435

01:11:39,750 --> 01:11:36,989

Arnold Schwarzenegger played which was a

1436

01:11:41,190 --> 01:11:39,760

cybernetic organism a machine that was

1437

01:11:42,570 --> 01:11:41,200

sent back in time now we're getting into

1438

01:11:44,160 --> 01:11:42,580

you know different parts of the story

1439

01:11:47,160 --> 01:11:44,170

but Skynet itself

1440

01:11:49,380 --> 01:11:47,170

it was the master AI that decided it

1441

01:11:51,420 --> 01:11:49,390

didn't need humans anymore and maybe it

1442

01:11:54,270 --> 01:11:51,430

needed a few so it used his robots to

1443

01:11:59,060 --> 01:11:54,280

enslave them now when Terminator 2 came

1444

01:12:01,410 --> 01:11:59,070

out the Pentium chip wasn't out yet

1445

01:12:04,260 --> 01:12:01,420

Windows 95

1446

01:12:08,310 --> 01:12:04,270

wasn't out yet the internet although it

1447

01:12:09,840 --> 01:12:08,320

was there was there for a couple of

1448

01:12:12,600 --> 01:12:09,850

hundred people around the United States

1449

01:12:15,870 --> 01:12:12,610

that were you know sharing email with

1450

01:12:19,800 --> 01:12:15,880

each other and it was starting to grow

1451

01:12:22,590 --> 01:12:19,810

but nobody knew what the internet or the

1452

01:12:24,380 --> 01:12:22,600

future or America Online wasn't out at

1453

01:12:26,600 --> 01:12:24,390

you know when Terminator 2

1454

01:12:29,330 --> 01:12:26,610

was launched so the vision of the future

1455

01:12:33,170 --> 01:12:29,340

with Skynet and what Cameron did there

1456

01:12:36,620 --> 01:12:33,180

was which which was a pretty solid

1457

01:12:39,530 --> 01:12:36,630

futurist view of things to come but we

1458

01:12:40,670 --> 01:12:39,540

actually arrived yeah it really was and

1459

01:12:42,350 --> 01:12:40,680

I don't know if you know the story of

1460

01:12:43,820 --> 01:12:42,360

how he came up with the idea but you

1461

01:12:45,410 --> 01:12:43,830

know the first time I was on your show

1462

01:12:47,390 --> 01:12:45,420

is talking about my book treasure hunt

1463

01:12:49,160 --> 01:12:47,400

which is all about where do we get our

1464

01:12:51,680 --> 01:12:49,170

intuitions that lead us down a certain

1465

01:12:53,780 --> 01:12:51,690

path in life which I call clues to

1466

01:12:55,850 --> 01:12:53,790

follow so James Cameron was a young

1467

01:12:57,980 --> 01:12:55,860

filmmaker working on these B movies I

1468

01:13:00,260 --> 01:12:57,990

think it was like John Carpenter movies

1469

01:13:01,670 --> 01:13:00,270

or something he was in Italy and one day

1470

01:13:03,470 --> 01:13:01,680

he was really sick and he couldn't go to

1471

01:13:05,810 --> 01:13:03,480

the set so it was kind of in a delirium

1472

01:13:08,180 --> 01:13:05,820

and he had this dream about robots

1473

01:13:10,010 --> 01:13:08,190

emerging from the fire you know and he

1474

01:13:11,750 --> 01:13:10,020

woke up and he didn't really know what

1475

01:13:14,120 --> 01:13:11,760

to do with it so he drew a picture of

1476

01:13:15,830 --> 01:13:14,130

these robots emerging from a fire and he

1477

01:13:17,840 --> 01:13:15,840

presented it to his friend Gail who was

1478

01:13:19,880 --> 01:13:17,850

also working on the movies and she said

1479

01:13:22,340 --> 01:13:19,890

well what's the story behind this you

1480

01:13:24,290 --> 01:13:22,350

know can you expand on it so he then

1481

01:13:26,330 --> 01:13:24,300

ended up writing the script for the

1482

01:13:28,100 --> 01:13:26,340

Terminator and Gale Anne Hurd became the

1483

01:13:29,390 --> 01:13:28,110

producer and James Cameron we know is

1484

01:13:31,250 --> 01:13:29,400

one of the most famous directors of all

1485

01:13:32,690 --> 01:13:31,260

time but you know he was following a

1486

01:13:34,160 --> 01:13:32,700

clue that came to him in the middle of

1487

01:13:35,900 --> 01:13:34,170

the night so I think there was a lot of

1488

01:13:37,490 --> 01:13:35,910

precedents there we're only now

1489

01:13:39,440 --> 01:13:37,500

beginning to see you know how something

1490

01:13:41,120 --> 01:13:39,450

like this could actually happen I think

1491

01:13:42,860 --> 01:13:41,130

back then we didn't really know how we

1492

01:13:45,800 --> 01:13:42,870

would go from where we were to to this

1493

01:13:47,180 --> 01:13:45,810

kind of you know general artificial

1494

01:13:50,180 --> 01:13:47,190

intelligence that wants to take over

1495

01:13:54,020 --> 01:13:50,190

well now as we look at your formula here

1496

01:13:59,290 --> 01:13:54,030

the first step in this conversation has

1497

01:14:01,760 --> 01:13:59,300

to be can AI surpass humans and

1498

01:14:06,770 --> 01:14:01,770

certainly that discussion is is out

1499

01:14:09,680 --> 01:14:06,780

there daily and that is a date in our

1500

01:14:12,970 --> 01:14:09,690

future that is as much discussed is it

1501

01:14:16,880 --> 01:14:12,980

possible well so you know back in the

1502

01:14:19,750 --> 01:14:16,890

50s or 60s Alan Turing was one of the

1503

01:14:21,920 --> 01:14:19,760

fathers of computer science and another

1504

01:14:24,440 --> 01:14:21,930

colleague of his you know they had

1505

01:14:27,020 --> 01:14:24,450

talked about this idea of a point at

1506

01:14:30,290 --> 01:14:27,030

which AI gets to be more intelligent

1507

01:14:31,700 --> 01:14:30,300

than humans and I don't remember who

1508

01:14:34,460 --> 01:14:31,710

exactly it was one that came up with the

1509

01:14:37,100 --> 01:14:34,470

term the singularity which was that

1510

01:14:38,359 --> 01:14:37,110

point and then later you know you had

1511

01:14:41,149 --> 01:14:38,369

people like

1512

01:14:43,159 --> 01:14:41,159

fiction writer Vernor Vinge and Ray

1513

01:14:46,459 --> 01:14:43,169

Kurzweil and others start popularizing

1514

01:14:48,319 --> 01:14:46,469

that term the singularity and you know

1515

01:14:51,409 --> 01:14:48,329

one of the people who's been really

1516

01:14:53,449 --> 01:14:51,419

concerned about this this topic is a

1517

01:14:55,819 --> 01:14:53,459

researcher at Oxford his name is Nick

1518

01:14:57,919 --> 01:14:55,829

Bostrom and he wrote a book called super

1519

01:15:00,259 --> 01:14:57,929

intelligence which is all about how AI

1520

01:15:02,089 --> 01:15:00,269

could be more intelligent than humans so

1521

01:15:04,429 --> 01:15:02,099

we're not at that point yet but I argue

1522

01:15:07,009 --> 01:15:04,439

in this article that we may not need to

1523

01:15:09,199 --> 01:15:07,019

even be at that point like the AI

1524

01:15:11,479 --> 01:15:09,209

doesn't actually have to be smarter than

1525

01:15:14,569 --> 01:15:11,489

humans in order for some type of

1526

01:15:17,859 --> 01:15:14,579

catastrophe to take place so we already

1527

01:15:20,419 --> 01:15:17,869

have killer AI in Texas the other day a

1528

01:15:22,639 --> 01:15:20,429

self-driving car ran over a pedestrian

1529

01:15:25,250 --> 01:15:22,649

and killed him right so you can have

1530

01:15:28,790 --> 01:15:25,260

dumb AI that's killing people as well as

1531

01:15:31,609 --> 01:15:28,800

smart AI and you know I sometimes use

1532

01:15:33,679 --> 01:15:31,619

the analogy that one of my spiritual

1533

01:15:35,600 --> 01:15:33,689

teacher said to me if you wanna if

1534

01:15:38,060 --> 01:15:35,610

you're having a sparring match with the

1535

01:15:38,929 --> 01:15:38,070

first level black belt or like a fifth

1536

01:15:40,729 --> 01:15:38,939

level black belt

1537

01:15:42,290 --> 01:15:40,739

you'd rather be fighting the fifth level

1538

01:15:45,469 --> 01:15:42,300

black belt and I said well why is that

1539

01:15:47,089 --> 01:15:45,479

and he says well because he has he or

1540

01:15:48,799 --> 01:15:47,099

she has more control and they won't hurt

1541

01:15:50,419 --> 01:15:48,809

you whereas the guy who just became a

1542

01:15:51,889 --> 01:15:50,429

black belt may have a lot of power but

1543

01:15:54,020 --> 01:15:51,899

he may not have as much control and he

1544

01:15:56,600 --> 01:15:54,030

may end up hurting you by mistake the

1545

01:15:58,369 --> 01:15:56,610

same could happen with AI it doesn't

1546

01:16:00,319 --> 01:15:58,379

have to be way more intelligent than us

1547

01:16:03,020 --> 01:16:00,329

in fact if it has a set of values that

1548

01:16:04,909 --> 01:16:03,030

tell it it needs to kill humans you know

1549

01:16:06,830 --> 01:16:04,919

it the smarter AI might figure out

1550

01:16:08,779 --> 01:16:06,840

that's not the best thing to do but the

1551

01:16:10,969 --> 01:16:08,789

AI which is smart we're not talking

1552

01:16:12,679 --> 01:16:10,979

about dumb AI but maybe of equal

1553

01:16:14,869 --> 01:16:12,689

intelligence or even close to equal

1554

01:16:18,350 --> 01:16:14,879

intelligence you know they could still

1555

01:16:20,540 --> 01:16:18,360

win in a physical fight by taking over

1556

01:16:22,250 --> 01:16:20,550

different weapons systems etc so we may

1557

01:16:25,520 --> 01:16:22,260

never we may not even need to reach the

1558

01:16:28,399 --> 01:16:25,530

singularity in in my opinion for this

1559

01:16:30,589 --> 01:16:28,409

scenario to happen it just depends on

1560

01:16:33,049 --> 01:16:30,599

you know how the AI is programmed and

1561

01:16:34,639 --> 01:16:33,059

what its goals and its values are and

1562

01:16:37,910 --> 01:16:34,649

its goals may be different than ours so

1563

01:16:40,379 --> 01:16:37,920

you lay it out in the article

1564

01:16:42,479 --> 01:16:40,389

you talk about the science fiction

1565

01:16:44,339 --> 01:16:42,489

aspect of it all science fiction is a

1566

01:16:46,649 --> 01:16:44,349

prediction of our future and a lot of it

1567

01:16:48,300 --> 01:16:46,659

has come to pass we don't need to list

1568

01:16:50,669 --> 01:16:48,310

all of those things here now but we

1569

01:16:53,040 --> 01:16:50,679

understand that certainly but you lay

1570

01:16:56,310 --> 01:16:53,050

out the scenario really well just like

1571

01:17:03,510 --> 01:16:56,320

we've done here but then you get to the

1572

01:17:07,649 --> 01:17:03,520

four gates of killer AI and so I want to

1573

01:17:09,629 --> 01:17:07,659

break these down and let's start let's

1574

01:17:14,490 --> 01:17:09,639

just go right into it let's start with

1575

01:17:19,410 --> 01:17:14,500

gate one ai and mi which is general

1576

01:17:21,839 --> 01:17:19,420

purpose and not a specific right so yeah

1577

01:17:24,450 --> 01:17:21,849

so these gates are meant to be gates

1578

01:17:26,939 --> 01:17:24,460

that if we unlock them with our

1579

01:17:28,770 --> 01:17:26,949

technology that's when we should start

1580

01:17:30,060 --> 01:17:28,780

to be worried right so people might ask

1581

01:17:32,339 --> 01:17:30,070

okay when could this happen

1582

01:17:37,129 --> 01:17:32,349

it's not going to happen today but these

1583

01:17:40,050 --> 01:17:37,139

four gates I think are sort of necessary

1584

01:17:42,080 --> 01:17:40,060

precursors to having this nightmare

1585

01:17:44,310 --> 01:17:42,090

scenario now there are lots of other AI

1586

01:17:45,750 --> 01:17:44,320

aspects that might be beneficial to us

1587

01:17:49,109 --> 01:17:45,760

but this is what we need to worry about

1588

01:17:50,550 --> 01:17:49,119

so the first gate is that says that you

1589

01:17:54,629 --> 01:17:50,560

know we need to have AI that's a little

1590

01:17:57,120 --> 01:17:54,639

more general whereas today the AI and

1591

01:17:59,550 --> 01:17:57,130

the ML is very specific so I talked

1592

01:18:03,540 --> 01:17:59,560

earlier about training or machine

1593

01:18:06,859 --> 01:18:03,550

learning and so you know we can train a

1594

01:18:09,600 --> 01:18:06,869

computer system today to be good at

1595

01:18:12,959 --> 01:18:09,610

handwriting or to be good at recognizing

1596

01:18:15,899 --> 01:18:12,969

you know radiology from x-rays it could

1597

01:18:17,160 --> 01:18:15,909

recognize faces in a crowd right so

1598

01:18:20,760 --> 01:18:17,170

there are so many different things that

1599

01:18:22,859 --> 01:18:20,770

AI can do but it's still very specific

1600

01:18:25,350 --> 01:18:22,869

to that task it has to be trained on

1601

01:18:27,930 --> 01:18:25,360

that task I mean going back to science

1602

01:18:30,149 --> 01:18:27,940

fiction you know if you think of for

1603

01:18:32,820 --> 01:18:30,159

example in Star Trek The Next Generation

1604

01:18:34,979 --> 01:18:32,830

right they have the Android data he was

1605

01:18:38,129 --> 01:18:34,989

a general-purpose AI he could learn new

1606

01:18:40,109 --> 01:18:38,139

things on his own he wasn't just trained

1607

01:18:42,839 --> 01:18:40,119

on very specific tasks

1608

01:18:45,750 --> 01:18:42,849

now we could approximate that today we

1609

01:18:47,459 --> 01:18:45,760

could go and say okay let's have one

1610

01:18:49,919 --> 01:18:47,469

machine learning thing that tells you

1611

01:18:51,450 --> 01:18:49,929

which task to do and then you go to the

1612

01:18:52,860 --> 01:18:51,460

more specific task but

1613

01:18:55,650 --> 01:18:52,870

even that's not enough this is where I

1614

01:18:57,180 --> 01:18:55,660

think we need a third wave of AI to get

1615

01:18:59,580 --> 01:18:57,190

to this this thing that's called a you

1616

01:19:00,930 --> 01:18:59,590

know a GI artificial or artificial

1617

01:19:03,450 --> 01:19:00,940

general intelligence or generalized

1618

01:19:07,100 --> 01:19:03,460

artificial intelligence and we're not

1619

01:19:10,190 --> 01:19:07,110

there yet but we are at the point where

1620

01:19:11,910 --> 01:19:10,200

machines can learn on their own

1621

01:19:13,680 --> 01:19:11,920

unsupervised

1622

01:19:15,330 --> 01:19:13,690

so I've so far I've talked about

1623

01:19:18,750 --> 01:19:15,340

training it with datasets that humans

1624

01:19:21,630 --> 01:19:18,760

have already classified so it can tell

1625

01:19:24,090 --> 01:19:21,640

if it's right or wrong there's a great

1626

01:19:26,220 --> 01:19:24,100

example where AI is being used to play

1627

01:19:27,959 --> 01:19:26,230

games and we know that you know many

1628

01:19:31,410 --> 01:19:27,969

years ago was a deep-blue I think one of

1629

01:19:35,790 --> 01:19:31,420

the MIT sorry the IBM AI is beat the

1630

01:19:37,680 --> 01:19:35,800

human champion in chess well later that

1631

01:19:39,479 --> 01:19:37,690

they were wondering if it could play the

1632

01:19:40,680 --> 01:19:39,489

game go now I'm not a player of go I

1633

01:19:42,209 --> 01:19:40,690

don't know if you are but it's more

1634

01:19:44,550 --> 01:19:42,219

complex than chess and has a lot of

1635

01:19:47,820 --> 01:19:44,560

rules and what happened was they told

1636

01:19:50,280 --> 01:19:47,830

the AI the rules of the game go and then

1637

01:19:53,190 --> 01:19:50,290

they just let it play against itself so

1638

01:19:56,100 --> 01:19:53,200

it actually figured out what the best

1639

01:19:59,100 --> 01:19:56,110

strategies were based upon you know who

1640

01:20:01,410 --> 01:19:59,110

won a or B and a and B were the same AI

1641

01:20:03,390 --> 01:20:01,420

in this case and so it actually got good

1642

01:20:06,180 --> 01:20:03,400

enough to beat the best human players

1643

01:20:08,120 --> 01:20:06,190

that go and so now we're seeing that

1644

01:20:10,800 --> 01:20:08,130

machines can learn on their own

1645

01:20:13,590 --> 01:20:10,810

unsupervised who are entering kind of a

1646

01:20:15,420 --> 01:20:13,600

new area but still that was for that

1647

01:20:18,330 --> 01:20:15,430

task of playing go you can see a

1648

01:20:20,520 --> 01:20:18,340

generalize maybe to other games the

1649

01:20:22,350 --> 01:20:20,530

autonomous cars will talk about

1650

01:20:24,959 --> 01:20:22,360

autonomous drones in a minute but anima

1651

01:20:28,170 --> 01:20:24,969

scars you know know the rules of the

1652

01:20:30,750 --> 01:20:28,180

road so that's the rule based and then

1653

01:20:33,000 --> 01:20:30,760

we feed it a lot of data which are the

1654

01:20:34,560 --> 01:20:33,010

signs and this is a person and this is

1655

01:20:36,300 --> 01:20:34,570

what you're supposed to do and you know

1656

01:20:37,890 --> 01:20:36,310

one of the problems that that Google had

1657

01:20:39,720 --> 01:20:37,900

like with their autonomous cars you know

1658

01:20:41,610 --> 01:20:39,730

I live in Mountain View right right down

1659

01:20:43,830 --> 01:20:41,620

the road from Google so we used to see

1660

01:20:45,780 --> 01:20:43,840

their autonomous cars years ago like

1661

01:20:48,000 --> 01:20:45,790

back in like 2007 when I first moved

1662

01:20:50,190 --> 01:20:48,010

there it was that it would stop at the

1663

01:20:52,470 --> 01:20:50,200

stoplight and it would wait for humans

1664

01:20:53,850 --> 01:20:52,480

to stop but the humans never stopped

1665

01:20:56,160 --> 01:20:53,860

they just kind of came to a rolling

1666

01:20:57,750 --> 01:20:56,170

thing so the car the autonomous car just

1667

01:21:00,780 --> 01:20:57,760

sat there because the humans never

1668

01:21:03,300 --> 01:21:00,790

stopped at a four-way stop so you know

1669

01:21:05,310 --> 01:21:03,310

the rules is the first step

1670

01:21:07,140 --> 01:21:05,320

data is the second step but then

1671

01:21:08,790 --> 01:21:07,150

there's this fuzziness of how things

1672

01:21:11,640 --> 01:21:08,800

happen in the real world and so we're

1673

01:21:16,830 --> 01:21:11,650

still a ways away from unlocking this

1674

01:21:20,030 --> 01:21:16,840

gate I think and the the the question

1675

01:21:26,879 --> 01:21:20,040

that I think should be addressed is

1676

01:21:31,229 --> 01:21:26,889

should we not allow machine learning in

1677

01:21:33,390 --> 01:21:31,239

the aspect of we we throw the code in it

1678

01:21:35,760 --> 01:21:33,400

you know it's done it's perfected and

1679

01:21:40,979 --> 01:21:35,770

they can do their task but there's no

1680

01:21:44,280 --> 01:21:40,989

like Ram there's no there's no ability

1681

01:21:47,819 --> 01:21:44,290

to you could only read but you can't

1682

01:21:50,040 --> 01:21:47,829

write and you can't solve problems

1683

01:21:53,430 --> 01:21:50,050

you're only dealing with and the code

1684

01:21:57,450 --> 01:21:53,440

could be very complex but the code only

1685

01:21:59,959 --> 01:21:57,460

reads it would that be an answer well

1686

01:22:04,200 --> 01:21:59,969

that's an initial answer right and so

1687

01:22:06,300 --> 01:22:04,210

today you know most of the time the code

1688

01:22:08,970 --> 01:22:06,310

is written actually there are general

1689

01:22:10,819 --> 01:22:08,980

algorithms right like the IBM Watson but

1690

01:22:13,350 --> 01:22:10,829

then they're applied and trained on

1691

01:22:17,430 --> 01:22:13,360

specific datasets and they run on

1692

01:22:19,020 --> 01:22:17,440

specific computers but there's a there's

1693

01:22:21,569 --> 01:22:19,030

an interesting book on this by an MIT

1694

01:22:23,790 --> 01:22:21,579

professor named Max tegmark called life

1695

01:22:25,439 --> 01:22:23,800

3.0 and he lays out a scenario where a

1696

01:22:27,930 --> 01:22:25,449

company developed this general-purpose

1697

01:22:30,990 --> 01:22:27,940

AI and they ran it only on virtual

1698

01:22:34,680 --> 01:22:31,000

machines right and so virtual machine is

1699

01:22:37,229 --> 01:22:34,690

like for example you know I have a Mac

1700

01:22:39,479 --> 01:22:37,239

here but I could run Windows on a

1701

01:22:42,750 --> 01:22:39,489

virtual machine inside my Mac so it

1702

01:22:46,080 --> 01:22:42,760

becomes like a bounded virtual machine

1703

01:22:48,410 --> 01:22:46,090

so if it's running in there it can't

1704

01:22:51,240 --> 01:22:48,420

necessarily affect my Hardware directly

1705

01:22:52,890 --> 01:22:51,250

because it's limited it's not running on

1706

01:22:54,330 --> 01:22:52,900

an actual physical processor it's

1707

01:22:56,729 --> 01:22:54,340

running on code on top of the processor

1708

01:22:59,879 --> 01:22:56,739

that's right and so there are ways to do

1709

01:23:01,589 --> 01:22:59,889

that initially but over time you know as

1710

01:23:03,780 --> 01:23:01,599

the virtual machines get more

1711

01:23:05,399 --> 01:23:03,790

sophisticated and there are ways for

1712

01:23:07,979 --> 01:23:05,409

virtual machines to talk to each other

1713

01:23:10,470 --> 01:23:07,989

you know that becomes a little more

1714

01:23:13,140 --> 01:23:10,480

tenuous right I think in the beginning

1715

01:23:14,700 --> 01:23:13,150

yes but over time it depends on how many

1716

01:23:17,160 --> 01:23:14,710

of those virtual machines are out there

1717

01:23:18,399 --> 01:23:17,170

and how sophisticated they are and as we

1718

01:23:21,070 --> 01:23:18,409

start talking about IO

1719

01:23:23,590 --> 01:23:21,080

this is why the equation isn't just AI

1720

01:23:27,100 --> 01:23:23,600

equals PI now right it's these other

1721

01:23:28,540 --> 01:23:27,110

pieces that actually make a big

1722

01:23:31,330 --> 01:23:28,550

difference because if the virtual

1723

01:23:32,740 --> 01:23:31,340

machines are running on these IOT s well

1724

01:23:34,750 --> 01:23:32,750

they have to be able to impact the

1725

01:23:38,169 --> 01:23:34,760

hardware somehow right you can't isolate

1726

01:23:40,120 --> 01:23:38,179

them completely and if code can run on

1727

01:23:42,910 --> 01:23:40,130

these IOT s then you've got the

1728

01:23:45,340 --> 01:23:42,920

possibility for bad things to happen

1729

01:23:48,939 --> 01:23:45,350

yeah well address this after we're done

1730

01:23:50,620 --> 01:23:48,949

all of these because you're right

1731

01:23:53,169 --> 01:23:50,630

not only should there be an off switch

1732

01:23:56,229 --> 01:23:53,179

and we'll discuss this further but maybe

1733

01:23:57,939 --> 01:23:56,239

a total disconnect from the IOT could be

1734

01:24:01,330 --> 01:23:57,949

an answer to as well it could still

1735

01:24:04,750 --> 01:24:01,340

learn but not you know remove its you

1736

01:24:06,820 --> 01:24:04,760

know remove its antenna if you will but

1737

01:24:11,110 --> 01:24:06,830

then we have the the other part of this

1738

01:24:13,750 --> 01:24:11,120

is where you have you know the Machine

1739

01:24:16,060 --> 01:24:13,760

side but you have the AI side and if the

1740

01:24:18,160 --> 01:24:16,070

two of them are working together then

1741

01:24:20,800 --> 01:24:18,170

they could possibly figure out how to

1742

01:24:23,709 --> 01:24:20,810

how to get the workarounds how to work

1743

01:24:25,030 --> 01:24:23,719

around humans right and that's where you

1744

01:24:27,760 --> 01:24:25,040

know the more intelligent the AI is

1745

01:24:29,740 --> 01:24:27,770

that's where it configured that kind of

1746

01:24:33,640 --> 01:24:29,750

thing out which is because every

1747

01:24:36,310 --> 01:24:33,650

computer in a sense has a base level of

1748

01:24:39,399 --> 01:24:36,320

codes usually called assembly code you

1749

01:24:41,320 --> 01:24:39,409

know right at the microchip level and so

1750

01:24:42,640 --> 01:24:41,330

if the AI becomes smart enough it can

1751

01:24:45,760 --> 01:24:42,650

figure out that it's running in a

1752

01:24:49,689 --> 01:24:45,770

virtual machine and then it can figure

1753

01:24:51,540 --> 01:24:49,699

out how to access the assembly code at

1754

01:24:56,040 --> 01:24:51,550

which point it can do whatever it wants

1755

01:25:00,790 --> 01:24:56,050

that's and that's the scary part because

1756

01:25:04,660 --> 01:25:00,800

Maday not the day after the second the

1757

01:25:07,240 --> 01:25:04,670

nanosecond after singularity is achieved

1758

01:25:11,680 --> 01:25:07,250

right the nanosecond

1759

01:25:16,000 --> 01:25:11,690

Riz the nanosecond it's over because the

1760

01:25:19,470 --> 01:25:16,010

ability to learn now runs 24 it doesn't

1761

01:25:22,629 --> 01:25:19,480

have to sleep right and and that's right

1762

01:25:24,310 --> 01:25:22,639

the abilities is what some people call

1763

01:25:26,620 --> 01:25:24,320

like an intelligence in explosions

1764

01:25:29,020 --> 01:25:26,630

people in the field say that the minute

1765

01:25:31,540 --> 01:25:29,030

it gets to the singularity it then

1766

01:25:32,100 --> 01:25:31,550

redesigns itself and starts designing

1767

01:25:34,350 --> 01:25:32,110

other

1768

01:25:36,720 --> 01:25:34,360

physical robots based on hardware that

1769

01:25:39,000 --> 01:25:36,730

it can control right and it does it very

1770

01:25:40,530 --> 01:25:39,010

quickly like you said I mean again going

1771

01:25:42,060 --> 01:25:40,540

back to science-fiction right with the

1772

01:25:44,129 --> 01:25:42,070

Terminator the famous line was it

1773

01:25:46,709 --> 01:25:44,139

doesn't eat it doesn't sleep that's what

1774

01:25:49,229 --> 01:25:46,719

it does that's all it does right right

1775

01:25:52,200 --> 01:25:49,239

and so you know that that nanosecond

1776

01:25:52,800 --> 01:25:52,210

after the singularity when all bets are

1777

01:25:57,149 --> 01:25:52,810

off

1778

01:26:00,390 --> 01:25:57,159

not not a couple of years later but a

1779

01:26:03,390 --> 01:26:00,400

week later you would have a very bad

1780

01:26:07,399 --> 01:26:03,400

problem on your hands

1781

01:26:11,220 --> 01:26:07,409

a planet a planet full of super-smart

1782

01:26:13,740 --> 01:26:11,230

Einsteins right that don't care about

1783

01:26:15,240 --> 01:26:13,750

you and they don't need food that's a

1784

01:26:19,050 --> 01:26:15,250

scary thought let's get to gate number

1785

01:26:20,609 --> 01:26:19,060

two we'll set up we'll pick up by gate

1786

01:26:21,990 --> 01:26:20,619

number two after the break we've got a

1787

01:26:25,140 --> 01:26:22,000

couple of minutes here but gate number

1788

01:26:27,840 --> 01:26:25,150

two a eye which can easily interface

1789

01:26:30,750 --> 01:26:27,850

with the physical world take us through

1790

01:26:33,030 --> 01:26:30,760

that right so this is you know an

1791

01:26:35,760 --> 01:26:33,040

important gate and this is one that has

1792

01:26:37,320 --> 01:26:35,770

two parts the first is AI which can

1793

01:26:39,479 --> 01:26:37,330

interface with a physical world and the

1794

01:26:41,939 --> 01:26:39,489

second is when it can interface with

1795

01:26:43,680 --> 01:26:41,949

weapons right that's when we start to

1796

01:26:46,410 --> 01:26:43,690

become worried I mentioned the x-files

1797

01:26:48,439 --> 01:26:46,420

episode earlier right where all the

1798

01:26:52,050 --> 01:26:48,449

different machines were or misbehaving

1799

01:26:54,840 --> 01:26:52,060

today we we have some AI that's

1800

01:26:57,720 --> 01:26:54,850

interacting with the physical world we

1801

01:26:59,310 --> 01:26:57,730

have autonomous cars as a perfect

1802

01:27:01,979 --> 01:26:59,320

example this is why I keep bringing them

1803

01:27:04,080 --> 01:27:01,989

up because the algorithms for autonomous

1804

01:27:07,919 --> 01:27:04,090

cars are now being applied to autonomous

1805

01:27:10,500 --> 01:27:07,929

drones and autonomous planes and whence

1806

01:27:13,140 --> 01:27:10,510

you once you have those you're in a very

1807

01:27:15,750 --> 01:27:13,150

different place once you have AI

1808

01:27:18,510 --> 01:27:15,760

deciding what the drone should do then

1809

01:27:22,320 --> 01:27:18,520

it's really you know not that far of a

1810

01:27:25,229 --> 01:27:22,330

leap for it to be able to actually fire

1811

01:27:27,359 --> 01:27:25,239

those weapons so you know today I

1812

01:27:30,450 --> 01:27:27,369

mentioned the drones earlier that that

1813

01:27:32,129 --> 01:27:30,460

the military uses well who's controlling

1814

01:27:34,800 --> 01:27:32,139

those drones well right now it could be

1815

01:27:36,780 --> 01:27:34,810

somebody at the CIA right who's looking

1816

01:27:38,939 --> 01:27:36,790

at a monitor and their computer with the

1817

01:27:40,620 --> 01:27:38,949

joystick and they're controlling you

1818

01:27:43,350 --> 01:27:40,630

know whether the drone should fire or

1819

01:27:45,300 --> 01:27:43,360

not or you've got some special forces in

1820

01:27:45,630 --> 01:27:45,310

the field that are either controlling

1821

01:27:48,120 --> 01:27:45,640

the drone

1822

01:27:51,030 --> 01:27:48,130

from there or they're using GPS signals

1823

01:27:55,020 --> 01:27:51,040

to tell the drone exactly where to go

1824

01:27:56,580 --> 01:27:55,030

so you know we've got both AI that's

1825

01:27:59,580 --> 01:27:56,590

interfacing with the physical world and

1826
01:28:01,950 --> 01:27:59,590
we have objects like drones which have

1827
01:28:04,290 --> 01:28:01,960
weapons that are attached to them now

1828
01:28:06,570 --> 01:28:04,300
all in AI would have to do is intercept

1829
01:28:09,720 --> 01:28:06,580
that signal right the signal from the

1830
01:28:13,560 --> 01:28:09,730
CIA to the drone and suddenly it has the

1831
01:28:17,580 --> 01:28:13,570
ability to fire those on whatever it

1832
01:28:20,040 --> 01:28:17,590
decides you know is the right target and

1833
01:28:22,860 --> 01:28:20,050
you know was it I think Vladimir Putin

1834
01:28:25,410 --> 01:28:22,870
was saying that the country that has the

1835
01:28:27,930 --> 01:28:25,420
best AI you know we'll basically control

1836
01:28:29,940 --> 01:28:27,940
the world in the future and that's

1837
01:28:32,880 --> 01:28:29,950
really interesting which means that

1838
01:28:35,220 --> 01:28:32,890

probably most militaries at least the

1839

01:28:38,490 --> 01:28:35,230

bigger ones are already experimenting

1840

01:28:40,590 --> 01:28:38,500

with autonomous weapons systems right so

1841

01:28:42,050 --> 01:28:40,600

that has gate number two gate number two

1842

01:28:44,220 --> 01:28:42,060

I think is one of the first to being

1843

01:28:45,840 --> 01:28:44,230

opened actually gate number one's a

1844

01:28:47,250 --> 01:28:45,850

little bit harder because you have to

1845

01:28:50,160 --> 01:28:47,260

have general-purpose a high but gate

1846

01:28:52,470 --> 01:28:50,170

number two is not that hard and the IOT

1847

01:28:56,550 --> 01:28:52,480

being out there makes it much more

1848

01:28:58,200 --> 01:28:56,560

possible for this to happen and you know

1849

01:29:00,420 --> 01:28:58,210

I also have some pictures in the article

1850

01:29:03,030 --> 01:29:00,430

of some of the Boston Dynamics robots

1851
01:29:05,250 --> 01:29:03,040
which some of you may have seen videos

1852
01:29:06,690 --> 01:29:05,260
of it looks like a dog it's got four

1853
01:29:08,670 --> 01:29:06,700
legs but there are different versions

1854
01:29:10,680 --> 01:29:08,680
with you know we talked about you talked

1855
01:29:13,260 --> 01:29:10,690
about octopuses earlier right you could

1856
01:29:16,080 --> 01:29:13,270
imagine eight-legged versions that can

1857
01:29:18,210 --> 01:29:16,090
basically you know traverse any kind of

1858
01:29:20,850 --> 01:29:18,220
terrain and and if you watch the videos

1859
01:29:22,110 --> 01:29:20,860
for this the big dog you see it kind of

1860
01:29:24,300 --> 01:29:22,120
going up steps and going through

1861
01:29:25,650 --> 01:29:24,310
hallways and you can see videos where

1862
01:29:27,930 --> 01:29:25,660
it's kind of looking at what's in front

1863
01:29:30,360 --> 01:29:27,940

of it and it's making decisions about

1864

01:29:33,840 --> 01:29:30,370

which direction to go or which direction

1865

01:29:37,530 --> 01:29:33,850

not to go did you see the episode of

1866

01:29:39,720 --> 01:29:37,540

black mirror with those dogs you know

1867

01:29:45,510 --> 01:29:39,730

I've heard about it I haven't seen it's

1868

01:29:48,030 --> 01:29:45,520

identical to the to the dynamics dog is

1869

01:29:51,390 --> 01:29:48,040

yellow but there's still the same face

1870

01:29:55,890 --> 01:29:51,400

the same front the same sensors and the

1871

01:29:58,350 --> 01:29:55,900

same frightening capabilities there but

1872

01:30:02,520 --> 01:29:58,360

now I've got to take a break but this is

1873

01:30:04,770 --> 01:30:02,530

think about this if you are a bad guy

1874

01:30:06,540 --> 01:30:04,780

out there in a military situation so

1875

01:30:08,880 --> 01:30:06,550

let's say you're Isis and you're in you

1876

01:30:11,370 --> 01:30:08,890

know some village and you see some

1877

01:30:14,040 --> 01:30:11,380

troops coming at you well you know that

1878

01:30:17,550 --> 01:30:14,050

those are troops and you can shoot at

1879

01:30:21,360 --> 01:30:17,560

the troops with your gun but imagine a

1880

01:30:24,360 --> 01:30:21,370

hundred little drones coming at you with

1881

01:30:26,310 --> 01:30:24,370

facial recognition right that's right

1882

01:30:28,050 --> 01:30:26,320

right and some of these draw and you

1883

01:30:29,790 --> 01:30:28,060

know something I might link mistakes at

1884

01:30:32,160 --> 01:30:29,800

times is yeah there's nothing you can do

1885

01:30:35,070 --> 01:30:32,170

that's when you drop and run you just

1886

01:30:37,890 --> 01:30:35,080

drop your gun and run but take that same

1887

01:30:40,530 --> 01:30:37,900

scenario with that facial recognition in

1888

01:30:42,570 --> 01:30:40,540

a crowd now you've got a bad actor in a

1889

01:30:44,340 --> 01:30:42,580

crowd they've identified somebody at a

1890

01:30:47,040 --> 01:30:44,350

rock concert that is going to attend a

1891

01:30:50,550 --> 01:30:47,050

rock concert and go and do something and

1892

01:30:53,220 --> 01:30:50,560

and take out the crowd you know take out

1893

01:30:56,640 --> 01:30:53,230

one single guy in a crowd with facial

1894

01:30:59,910 --> 01:30:56,650

recognition we are right on the edge of

1895

01:31:03,450 --> 01:30:59,920

that being a possibility and if that

1896

01:31:05,700 --> 01:31:03,460

goes into the wrong hands now we've got

1897

01:31:08,010 --> 01:31:05,710

a really bad like you said if something

1898

01:31:10,550 --> 01:31:08,020

wants to take over the system it

1899

01:31:14,610 --> 01:31:10,560

certainly can and you could input any

1900

01:31:16,260 --> 01:31:14,620

photograph right that's right and you

1901

01:31:19,530 --> 01:31:16,270

know the future of assassination is

1902

01:31:21,959 --> 01:31:19,540

really going to be these drones you know

1903

01:31:24,270 --> 01:31:21,969

that are out there killing people rather

1904

01:31:27,330 --> 01:31:24,280

than snipers necessarily because they

1905

01:31:29,160 --> 01:31:27,340

can go anywhere and you know you don't

1906

01:31:32,790 --> 01:31:29,170

have to put you don't have to have send

1907

01:31:35,760 --> 01:31:32,800

troops out specifically so the key is if

1908

01:31:37,080 --> 01:31:35,770

the machine can make that decision or

1909

01:31:39,360 --> 01:31:37,090

it's the human that has to make the

1910

01:31:42,090 --> 01:31:39,370

decision right I mean there was a case

1911

01:31:43,620 --> 01:31:42,100

where in the Soviet Union where the

1912

01:31:45,360 --> 01:31:43,630

radar said there were five missiles

1913

01:31:47,939 --> 01:31:45,370

coming from America and they were

1914

01:31:50,220 --> 01:31:47,949

supposed to fire their nuclear rockets

1915

01:31:52,950 --> 01:31:50,230

if missiles if that happened and there

1916

01:31:55,169 --> 01:31:52,960

was an operator of the station who

1917

01:31:57,930 --> 01:31:55,179

looked at it he didn't believe that the

1918

01:32:00,270 --> 01:31:57,940

US would fire only five five missiles if

1919

01:32:01,620 --> 01:32:00,280

it was going to do an actual first

1920

01:32:03,720 --> 01:32:01,630

strike and so he didn't tell his

1921

01:32:05,450 --> 01:32:03,730

superiors about it turned out it was a

1922

01:32:07,800 --> 01:32:05,460

mistake in the sensors and somehow

1923

01:32:09,450 --> 01:32:07,810

sunlight bouncing off certain things

1924

01:32:11,670 --> 01:32:09,460

actually made the radar I think that

1925

01:32:12,990 --> 01:32:11,680

or five missiles coming from Alaska to

1926

01:32:14,910 --> 01:32:13,000

the Soviet Union it was a good thing he

1927

01:32:16,440 --> 01:32:14,920

had that human judgment and so if you

1928

01:32:18,750 --> 01:32:16,450

don't have that human judgment in there

1929

01:32:22,320 --> 01:32:18,760

you know the possibility for mistakes

1930

01:32:24,270 --> 01:32:22,330

is is really high and we have to we have

1931

01:32:26,610 --> 01:32:24,280

to constantly think about it in those

1932

01:32:28,890 --> 01:32:26,620

terms because if it would have been AI

1933

01:32:30,150 --> 01:32:28,900

making that decision you and I wouldn't

1934

01:32:32,070 --> 01:32:30,160

be here on the radio right now

1935

01:32:33,990 --> 01:32:32,080

this is fade to black and that's the

1936

01:32:36,030 --> 01:32:34,000

truth stayed to black our guest tonight

1937

01:32:38,620 --> 01:32:36,040

R is Burke we'll be right back stay with

1938

01:32:38,630 --> 01:32:54,430

[Music]

1939

01:33:00,879 --> 01:32:57,609

way out here we listen to Jimmy Church

1940

01:33:03,140 --> 01:33:00,889

you're listening to faint and black

1941

01:33:04,430 --> 01:33:03,150

always on the edge of the hottest

1942

01:33:07,729 --> 01:33:04,440

alternative talk

1943

01:33:26,390 --> 01:33:07,739

Jimmy church with fade to black stay GRA

1944

01:33:29,750 --> 01:33:26,400

radio.com Akane's

1945

01:33:31,490 --> 01:33:29,760

earthquakes wildfires this year we've

1946

01:33:33,890 --> 01:33:31,500

experienced more than our fair share

1947

01:33:36,770 --> 01:33:33,900

this is Jimmy Church of fade to black

1948

01:33:38,959 --> 01:33:36,780

and last month I decided to make sure my

1949

01:33:41,149 --> 01:33:38,969

family does not have to worry about food

1950

01:33:44,120 --> 01:33:41,159

should we get caught in a real emergency

1951

01:33:46,220 --> 01:33:44,130

situation introducing Humana

1952

01:33:48,350 --> 01:33:46,230

a healthy storable product that tastes

1953

01:33:50,149 --> 01:33:48,360

so good that you'll want to eat it every

1954

01:33:52,609 --> 01:33:50,159

day instead of just during those times

1955

01:33:56,000 --> 01:33:52,619

of duress all new manna products have a

1956

01:33:58,939 --> 01:33:56,010

25 year shelf life our msg and GMO free

1957

01:34:01,100 --> 01:33:58,949

no preservatives and are made in America

1958

01:34:03,140 --> 01:34:01,110

with the new manna pack in your home

1959

01:34:05,689 --> 01:34:03,150

you'll be able to sleep at night knowing

1960

01:34:08,570 --> 01:34:05,699

that you protected your family not only

1961

01:34:10,970 --> 01:34:08,580

have I tasted and tested I own it

1962

01:34:12,709 --> 01:34:10,980

now you can too just click on the new

1963

01:34:15,050 --> 01:34:12,719

manna banner on Jimmy Church radio.com

1964

01:34:17,510 --> 01:34:15,060

and use the promo code Jimmy when you

1965

01:34:19,160 --> 01:34:17,520

order in addition to a discount we'll

1966

01:34:20,120 --> 01:34:19,170

send you an autograph fade to black

1967

01:34:23,990 --> 01:34:20,130

t-shirt

1968

01:34:25,520 --> 01:34:24,000

seriously gobekli tepe do you worry a

1969

01:34:27,910 --> 01:34:25,530

lot whether you're a college student

1970

01:34:30,439 --> 01:34:27,920

busy professional parent or grandparent

1971

01:34:32,479 --> 01:34:30,449

ongoing stress and elevated levels of

1972

01:34:34,760 --> 01:34:32,489

the stress hormone cortisol can rob your

1973

01:34:36,950 --> 01:34:34,770

memory your health and your future now

1974

01:34:38,899 --> 01:34:36,960

you can combat the effects of stress and

1975

01:34:41,270 --> 01:34:38,909

anxiety while improving your memory and

1976

01:34:43,609 --> 01:34:41,280

recall at the same time with the dietary

1977

01:34:45,229 --> 01:34:43,619

supplement calm and clever studies show

1978

01:34:48,140 --> 01:34:45,239

that the ingredients in common clever

1979

01:34:49,430 --> 01:34:48,150

reduce cortisol by as much as 30% in one

1980

01:34:51,379 --> 01:34:49,440

to two weeks call one eight hundred

1981

01:34:53,850 --> 01:34:51,389

seventy five eight eight seven four six

1982

01:34:56,340 --> 01:34:53,860

or calm and clever calm

1983

01:35:05,129 --> 01:34:56,350

you listen to us and we listen to you

1984

01:35:06,840 --> 01:35:05,139

and so does the CIA k GRA radio.com hi

1985

01:35:07,590 --> 01:35:06,850

folks what can I say without making

1986

01:35:09,300 --> 01:35:07,600

claims

1987

01:35:10,830 --> 01:35:09,310

seaweedy is truly the buzzword for

1988

01:35:12,750 --> 01:35:10,840

health what does it do government

1989

01:35:14,729 --> 01:35:12,760

institutions will not allow me to say

1990

01:35:17,609 --> 01:35:14,739

what this wonderful oil does for us but

1991

01:35:20,280 --> 01:35:17,619

I can say it's non-gmo and organic I can

1992

01:35:22,229 --> 01:35:20,290

say it's point zero zero three THC which

1993

01:35:24,510 --> 01:35:22,239

in plain English means you won't get

1994

01:35:26,550 --> 01:35:24,520

high there are those that want to squash

1995

01:35:28,350 --> 01:35:26,560

your freedom to buy natural products

1996

01:35:30,390 --> 01:35:28,360

fight back with your purchase power in

1997

01:35:32,490 --> 01:35:30,400

the end it is you that takes care of

1998

01:35:37,140 --> 01:35:32,500

your health go to ancient life oil calm

1999

01:35:38,609 --> 01:35:37,150

one more time ancient life oil calm you

2000

01:35:40,919 --> 01:35:38,619

are listening to fade to black

2001

01:35:45,750 --> 01:35:40,929

with Jimmy Church on the game change in

2002

01:35:47,790 --> 01:35:45,760

network hi I'm Lisa Vance you're

2003

01:35:50,729 --> 01:35:47,800

listening to Jimmy Church this is a

2004

01:35:54,560 --> 01:35:50,739

revolution the revolution will not be

2005

01:35:59,990 --> 01:35:54,570

televised the revolution is on radio

2006

01:36:00,000 --> 01:36:38,189

[Music]

2007

01:36:42,580 --> 01:36:41,320

welcome back fade to black

2008

01:36:45,250 --> 01:36:42,590

I'm your host Jimmy Church I guess

2009

01:36:47,830 --> 01:36:45,260

tonight rizz Burke and we are talking

2010

01:36:51,070 --> 01:36:47,840

about his article recently published at

2011

01:36:53,260 --> 01:36:51,080

hacker noon we're gonna get it up there

2012

01:36:55,330 --> 01:36:53,270

and on stellar here in just a second but

2013

01:36:57,280 --> 01:36:55,340

it's called the road to killer AI ml

2014

01:37:04,689 --> 01:36:57,290

plus blockchain Plus IOT post drones

2015

01:37:06,880 --> 01:37:04,699

equals Skynet yeah Riz the next gate and

2016

01:37:08,709 --> 01:37:06,890

we're gonna get through all of this

2017

01:37:10,689 --> 01:37:08,719

because we have to go back and and and

2018

01:37:12,610 --> 01:37:10,699

talk about all of these implications and

2019

01:37:15,430 --> 01:37:12,620

and continue to break this down it's

2020

01:37:19,300 --> 01:37:15,440

fascinating the gate number three I've

2021

01:37:21,250 --> 01:37:19,310

talked about so much and I'm glad that

2022

01:37:24,100 --> 01:37:21,260

you pointed this out as probably being

2023

01:37:25,900 --> 01:37:24,110

the most important gate number one which

2024

01:37:29,080 --> 01:37:25,910

is the off switch we'll get to that in a

2025

01:37:34,689 --> 01:37:29,090

second but how has the hacker noon

2026

01:37:35,800 --> 01:37:34,699

community responded to this article well

2027

01:37:39,520 --> 01:37:35,810

you know it's gotten a lot of

2028

01:37:42,520 --> 01:37:39,530

interesting responses and I think

2029

01:37:45,520 --> 01:37:42,530

there's a lot of enthusiasm about AI

2030

01:37:48,610 --> 01:37:45,530

right now in the kind of the technical

2031

01:37:50,680 --> 01:37:48,620

community but there have been you know a

2032

01:37:52,420 --> 01:37:50,690

lot of prominent folks you know ranging

2033

01:37:54,100 --> 01:37:52,430

from Stephen Hawking who passed away

2034

01:37:56,320 --> 01:37:54,110

recently entail on mosques saying that

2035

01:37:58,360 --> 01:37:56,330

AI could be the biggest existential

2036

01:38:00,340 --> 01:37:58,370

threat so I think many people are aware

2037

01:38:01,959 --> 01:38:00,350

of it well you know what I try to do in

2038

01:38:03,189 --> 01:38:01,969

this article is to say how do we get

2039

01:38:05,590 --> 01:38:03,199

there from here

2040

01:38:08,530 --> 01:38:05,600

and not to provide a road map but really

2041

01:38:10,689 --> 01:38:08,540

to for us to see the signposts along the

2042

01:38:12,070 --> 01:38:10,699

way that might get us to be worried so

2043

01:38:14,200 --> 01:38:12,080

yeah I've had a lot of a lot of good

2044

01:38:16,930 --> 01:38:14,210

responses you know to the article well

2045

01:38:20,320 --> 01:38:16,940

you know the hackers out there of all

2046

01:38:23,290 --> 01:38:20,330

forms and developers and coders and and

2047

01:38:25,870 --> 01:38:23,300

that community they they discuss these

2048

01:38:28,560 --> 01:38:25,880

implications all the time and certainly

2049

01:38:31,120 --> 01:38:28,570

think about it but getting it out there

2050

01:38:33,430 --> 01:38:31,130

globally to discuss this is something

2051

01:38:35,590 --> 01:38:33,440

that it really needs to be addressed and

2052

01:38:37,900 --> 01:38:35,600

I and I don't think that it is talked

2053

01:38:39,400 --> 01:38:37,910

about enough and and as long as it

2054

01:38:41,709 --> 01:38:39,410

doesn't interfere with somebody's life

2055

01:38:45,160 --> 01:38:41,719

right now they tend to ignore it and

2056

01:38:46,800 --> 01:38:45,170

that's a scary thought for me and I

2057

01:38:49,630 --> 01:38:46,810

think you know that's generally true of

2058

01:38:50,590 --> 01:38:49,640

technical people and scientists right

2059

01:38:53,320 --> 01:38:50,600

going back to

2060

01:38:55,450 --> 01:38:53,330

the development of the atomic bomb right

2061

01:38:57,040 --> 01:38:55,460

I mean they were just focused you know

2062

01:38:59,590 --> 01:38:57,050

they had the Manhattan Project they had

2063

01:39:01,630 --> 01:38:59,600

that place up in Los Alamos where for

2064

01:39:04,150 --> 01:39:01,640

two years you know the scientists were

2065

01:39:06,640 --> 01:39:04,160

focused and engineers on one thing which

2066

01:39:08,440 --> 01:39:06,650

is how do we take the theory of atomic

2067

01:39:10,930 --> 01:39:08,450

fission and make a bomb and it wasn't

2068

01:39:14,560 --> 01:39:10,940

until they actually you know had a

2069

01:39:17,080 --> 01:39:14,570

working prototype which they exploded at

2070

01:39:19,180 --> 01:39:17,090

Trinity in New Mexico that they really

2071

01:39:21,670 --> 01:39:19,190

started to wonder about what they had

2072

01:39:23,710 --> 01:39:21,680

done right you have the famous line

2073

01:39:26,170 --> 01:39:23,720

where Robert Oppenheimer who was the

2074

01:39:27,880 --> 01:39:26,180

head of the project you know remembered

2075

01:39:29,860 --> 01:39:27,890

from the bhagavad-gita it said I have

2076

01:39:31,030 --> 01:39:29,870

become death itself and suddenly he

2077

01:39:32,770 --> 01:39:31,040

started to have second thoughts about

2078

01:39:34,420 --> 01:39:32,780

what he'd been doing the good thing

2079

01:39:37,120 --> 01:39:34,430

about this topic is there's enough

2080

01:39:39,550 --> 01:39:37,130

people talking about it now that we may

2081

01:39:41,830 --> 01:39:39,560

be able to head it off before it happens

2082

01:39:43,840 --> 01:39:41,840

right because it is in the consciousness

2083

01:39:45,610 --> 01:39:43,850

now that this could actually happen the

2084

01:39:47,950 --> 01:39:45,620

AI is getting sophisticated enough to

2085

01:39:51,880 --> 01:39:47,960

get there so I've talked about this off

2086

01:39:53,560 --> 01:39:51,890

switch and you point out here for gate

2087

01:39:57,160 --> 01:39:53,570

number three that right now there isn't

2088

01:39:58,750 --> 01:39:57,170

one yeah and actually before I get to

2089

01:40:00,160 --> 01:39:58,760

that just with gate number two there's

2090

01:40:02,500 --> 01:40:00,170

one other thing I wanted to bring up

2091

01:40:04,710 --> 01:40:02,510

which is so as I said I'm pretty sure

2092

01:40:07,840 --> 01:40:04,720

most militaries are already

2093

01:40:10,090 --> 01:40:07,850

experimenting with autonomous weapons

2094

01:40:11,500 --> 01:40:10,100

autonomous killing machines even if they

2095

01:40:14,200 --> 01:40:11,510

haven't rolled it out because they're

2096

01:40:16,240 --> 01:40:14,210

experimenting in a very specific way you

2097

01:40:19,180 --> 01:40:16,250

know I also talked about how machines

2098

01:40:22,870 --> 01:40:19,190

were machine learning was very specific

2099

01:40:25,150 --> 01:40:22,880

tasks and they could beat humans at some

2100

01:40:27,160 --> 01:40:25,160

games well something happened recently

2101

01:40:29,680 --> 01:40:27,170

and this is Elon Musk's open AI

2102

01:40:33,130 --> 01:40:29,690

initiative where they actually had the

2103

01:40:34,330 --> 01:40:33,140

machine play a video game so now we're

2104

01:40:37,210 --> 01:40:34,340

not talking about chess or physical

2105

01:40:39,610 --> 01:40:37,220

games we're talking about a video game

2106

01:40:42,280 --> 01:40:39,620

like dota 2 I don't know if any of your

2107

01:40:44,440 --> 01:40:42,290

listeners know you know either dota 2 or

2108

01:40:47,260 --> 01:40:44,450

counter-strike or League of Legends

2109

01:40:48,970 --> 01:40:47,270

these are very popular eSports games

2110

01:40:51,190 --> 01:40:48,980

where people compete against each other

2111

01:40:54,040 --> 01:40:51,200

by playing these video games and in

2112

01:40:57,160 --> 01:40:54,050

these games you're you're like a wizard

2113

01:40:59,470 --> 01:40:57,170

you're like a sorcerer a thief a

2114

01:41:03,070 --> 01:40:59,480

barbarian and you're trying to kill the

2115

01:41:04,320 --> 01:41:03,080

other team of five and so turns out that

2116

01:41:06,330 --> 01:41:04,330

AI can play

2117

01:41:08,760 --> 01:41:06,340

those games as well if not better than

2118

01:41:10,500 --> 01:41:08,770

humans because of the response time

2119

01:41:12,480 --> 01:41:10,510

right so they can have a response time

2120

01:41:14,340 --> 01:41:12,490

that we really can't have as humans and

2121

01:41:17,850 --> 01:41:14,350

so they were able to beat the best dota

2122

01:41:19,980 --> 01:41:17,860

2 players so this is a case where an AI

2123

01:41:21,840 --> 01:41:19,990

a computer program is playing a video

2124

01:41:24,060 --> 01:41:21,850

game which is a computer generated game

2125

01:41:26,400 --> 01:41:24,070

with graphics on the strain it's looking

2126
01:41:29,700 --> 01:41:26,410
at the graphics and it's using machine

2127
01:41:31,650 --> 01:41:29,710
vision to figure out okay this is a

2128
01:41:34,320 --> 01:41:31,660
character this is a character this is a

2129
01:41:36,300 --> 01:41:34,330
background object and so we've talked

2130
01:41:38,340 --> 01:41:36,310
about machine vision being used in the

2131
01:41:39,690 --> 01:41:38,350
real world by autonomous cars for

2132
01:41:41,550 --> 01:41:39,700
frigging out you know when they should

2133
01:41:42,930 --> 01:41:41,560
turn and when they should stop but this

2134
01:41:45,000 --> 01:41:42,940
is interesting because it's machine

2135
01:41:48,240 --> 01:41:45,010
vision in a computer program itself it's

2136
01:41:49,880 --> 01:41:48,250
a computer-generated world and they're

2137
01:41:52,500 --> 01:41:49,890
very effective now anyone who's seen

2138
01:41:54,180 --> 01:41:52,510

counter-strike as a game of Counter

2139

01:41:56,160 --> 01:41:54,190

Strike global Offensive you know you've

2140

01:41:58,380 --> 01:41:56,170

got these military guys in kind of an

2141

01:42:01,320 --> 01:41:58,390

Iraq like situation shooting at each

2142

01:42:03,540 --> 01:42:01,330

other well if the AI is able to direct

2143

01:42:05,190 --> 01:42:03,550

those virtual guns so well at and

2144

01:42:05,580 --> 01:42:05,200

recognize which are humans and which

2145

01:42:10,230 --> 01:42:05,590

aren't

2146

01:42:12,660 --> 01:42:10,240

it's not a far leap for to look at the

2147

01:42:14,550 --> 01:42:12,670

images coming from drones or that are in

2148

01:42:16,350 --> 01:42:14,560

the battlefield and figure out what our

2149

01:42:17,580 --> 01:42:16,360

characters what our people what our not

2150

01:42:18,900 --> 01:42:17,590

and start shooting at them it's the same

2151

01:42:21,360 --> 01:42:18,910

kind of mechanic

2152

01:42:24,150 --> 01:42:21,370

so really gate number two is worrisome

2153

01:42:25,470 --> 01:42:24,160

because we're pretty much there we will

2154

01:42:29,820 --> 01:42:25,480

be within a few years

2155

01:42:31,350 --> 01:42:29,830

yeah dota 2 is cool by the way yeah it's

2156

01:42:32,730 --> 01:42:31,360

a cool game but it's interesting that

2157

01:42:35,610 --> 01:42:32,740

you know the machines can learn to play

2158

01:42:38,130 --> 01:42:35,620

it just by looking at the visuals and

2159

01:42:41,310 --> 01:42:38,140

how what's happening yes me and so are

2160

01:42:44,220 --> 01:42:41,320

they when we're talking about this are

2161

01:42:46,980 --> 01:42:44,230

they using the controller electronically

2162

01:42:50,250 --> 01:42:46,990

or is there a robot hand controlling the

2163

01:42:52,350 --> 01:42:50,260

controller I probably they're they're

2164

01:42:54,600 --> 01:42:52,360

not using a robot hand everybody has

2165

01:42:56,250 --> 01:42:54,610

soft without the rhythm right yeah give

2166

01:42:58,920 --> 01:42:56,260

like move the cursor around on the

2167

01:43:01,260 --> 01:42:58,930

screen right so you can kind of you can

2168

01:43:02,430 --> 01:43:01,270

take over the input midstream and it's

2169

01:43:03,630 --> 01:43:02,440

the same kind of thing that I talked

2170

01:43:05,700 --> 01:43:03,640

about earlier where you have the CIA

2171

01:43:07,470 --> 01:43:05,710

analysts operating a drone with a

2172

01:43:09,780 --> 01:43:07,480

joystick sending a signal to the drone

2173

01:43:11,700 --> 01:43:09,790

they would just cut in the middle of

2174

01:43:12,990 --> 01:43:11,710

that and send the signal and not have to

2175

01:43:16,860 --> 01:43:13,000

worry about the physical track and

2176
01:43:17,560 --> 01:43:16,870
there's also the lag time of engaging a

2177
01:43:20,470 --> 01:43:17,570
button

2178
01:43:23,890 --> 01:43:20,480
moving you know the joystick there's a

2179
01:43:26,500 --> 01:43:23,900
lag time there and electronically that

2180
01:43:30,580 --> 01:43:26,510
you're limited to right but if you are

2181
01:43:32,709 --> 01:43:30,590
making the electronic connection that

2182
01:43:34,660 --> 01:43:32,719
you're engaging the switch on or the

2183
01:43:37,120 --> 01:43:34,670
button but that is switched

2184
01:43:38,950 --> 01:43:37,130
electronically in software there's no

2185
01:43:41,200 --> 01:43:38,960
way you could beat the machine the

2186
01:43:48,790 --> 01:43:41,210
machine would just kick your ass it

2187
01:43:54,160 --> 01:43:48,800
would be dated speed a light response

2188
01:43:55,839 --> 01:43:54,170

time wow that's a crazy thought so okay

2189

01:44:01,930 --> 01:43:55,849

so yeah that's exactly right

2190

01:44:03,970 --> 01:44:01,940

and when DARPA right now addressing this

2191

01:44:09,729 --> 01:44:03,980

and then we'll move on to the off switch

2192

01:44:11,830 --> 01:44:09,739

DARPA just released not too long ago one

2193

01:44:18,129 --> 01:44:11,840

of their projects which is a missile

2194

01:44:20,800 --> 01:44:18,139

swarm right so you don't have what you

2195

01:44:23,350 --> 01:44:20,810

don't have one Tomahawk missile that's

2196

01:44:26,649 --> 01:44:23,360

intelligent no you have a hundred

2197

01:44:30,450 --> 01:44:26,659

smaller versions of it that just stay on

2198

01:44:34,750 --> 01:44:30,460

theater and they wait for something to

2199

01:44:36,640 --> 01:44:34,760

attack intelligently that there's a

2200

01:44:39,520 --> 01:44:36,650

hundred of them up there instead of one

2201
01:44:40,540 --> 01:44:39,530
big one and they just cruise around and

2202
01:44:42,370 --> 01:44:40,550
and wait

2203
01:44:44,910 --> 01:44:42,380
that's a scary and that's that's what

2204
01:44:48,010 --> 01:44:44,920
they are working on right now and

2205
01:44:50,229 --> 01:44:48,020
looking for deployment of this in 2020

2206
01:44:53,530 --> 01:44:50,239
and this is we're halfway through twenty

2207
01:44:56,129 --> 01:44:53,540
years that's very soon and when you've

2208
01:45:00,069 --> 01:44:56,139
got swarms like that right that are all

2209
01:45:01,810 --> 01:45:00,079
attacking now you need an AI in response

2210
01:45:05,290 --> 01:45:01,820
so what we're really talking about is an

2211
01:45:07,060 --> 01:45:05,300
AI arms race in a way right so there's

2212
01:45:08,649 --> 01:45:07,070
the connection to the physical objects

2213
01:45:10,410 --> 01:45:08,659

but then there's the response time of

2214

01:45:15,850 --> 01:45:10,420

people controlling those objects and

2215

01:45:17,800 --> 01:45:15,860

already you know on a lot of destroyer

2216

01:45:20,649 --> 01:45:17,810

u.s. warships you know there are

2217

01:45:22,870 --> 01:45:20,659

anti-missile systems that are scanning

2218

01:45:25,479 --> 01:45:22,880

the radar and firing automatically but

2219

01:45:26,649 --> 01:45:25,489

you still need some human approval but

2220

01:45:29,140 --> 01:45:26,659

once you get to the point where you've

2221

01:45:31,080 --> 01:45:29,150

got these swarms attacking you know the

2222

01:45:33,630 --> 01:45:31,090

only thing that can respond is a

2223

01:45:35,190 --> 01:45:33,640

so now the other side has to have better

2224

01:45:37,460 --> 01:45:35,200

AI and then you have to have better AI

2225

01:45:39,900 --> 01:45:37,470

and then suddenly you're in an arms race

2226

01:45:41,220 --> 01:45:39,910

and that's where it becomes scary I mean

2227

01:45:42,540 --> 01:45:41,230

I think we're still a little ways off

2228

01:45:44,700 --> 01:45:42,550

from that but it's coming pretty soon

2229

01:45:47,400 --> 01:45:44,710

yeah that's that's that's the goal I

2230

01:45:50,310 --> 01:45:47,410

mean that's the goal for for for all of

2231

01:45:51,810 --> 01:45:50,320

the big state players here okay let's

2232

01:45:55,500 --> 01:45:51,820

discuss this off switch

2233

01:45:57,510 --> 01:45:55,510

AI doesn't have one today well depends

2234

01:46:00,930 --> 01:45:57,520

on where the AI is and this is actually

2235

01:46:05,370 --> 01:46:00,940

I think one of the things that we can

2236

01:46:08,130 --> 01:46:05,380

probably control and you know the idea

2237

01:46:10,230 --> 01:46:08,140

is that if there's no off switch that's

2238

01:46:12,810 --> 01:46:10,240

when we have to worry about this

2239

01:46:14,910 --> 01:46:12,820

nightmare scenario that AI could take

2240

01:46:18,450 --> 01:46:14,920

over because if you just have one robot

2241

01:46:21,320 --> 01:46:18,460

that's really intelligent right we can

2242

01:46:25,980 --> 01:46:21,330

just destroy the robot with a missile

2243

01:46:27,690 --> 01:46:25,990

and so but if it's not just one robot

2244

01:46:29,450 --> 01:46:27,700

and the same thing with I mentioned data

2245

01:46:31,650 --> 01:46:29,460

in Star Trek The Next Generation

2246

01:46:35,160 --> 01:46:31,660

intelligent Android well he had an off

2247

01:46:37,050 --> 01:46:35,170

switch and he actually let the Star Trek

2248

01:46:38,820 --> 01:46:37,060

crew captain forgotten others turned him

2249

01:46:41,280 --> 01:46:38,830

off from time to time means a little

2250

01:46:43,710 --> 01:46:41,290

switch in the back of his head you know

2251

01:46:45,960 --> 01:46:43,720

it's not given that an intelligent robot

2252

01:46:48,960 --> 01:46:45,970

would let us turn it off to begin with

2253

01:46:51,600 --> 01:46:48,970

but I think the bigger issue and and I

2254

01:46:55,680 --> 01:46:51,610

use a analogy again from Terminator 3

2255

01:46:58,650 --> 01:46:55,690

rise of the machines right where the the

2256

01:47:01,290 --> 01:46:58,660

young John Connor breaks into this

2257

01:47:03,360 --> 01:47:01,300

military NORAD like base I think in

2258

01:47:05,040 --> 01:47:03,370

Cheyenne Mountain because they're trying

2259

01:47:07,980 --> 01:47:05,050

to turn off Skynet because they know

2260

01:47:11,040 --> 01:47:07,990

that this nightmare scenario is coming

2261

01:47:12,990 --> 01:47:11,050

and so they break in they're able to get

2262

01:47:14,480 --> 01:47:13,000

into the bunker and he wants to turn off

2263

01:47:17,670 --> 01:47:14,490

the computer and that's when he realizes

2264

01:47:20,190 --> 01:47:17,680

right that there is no central computer

2265

01:47:22,290 --> 01:47:20,200

and direct quote is you know by the time

2266

01:47:24,120 --> 01:47:22,300

Skynet became self-aware it had spread

2267

01:47:26,520 --> 01:47:24,130

into millions of computer servers across

2268

01:47:28,170 --> 01:47:26,530

the planet ordinary computers and office

2269

01:47:30,420 --> 01:47:28,180

buildings dorm rooms everywhere it was

2270

01:47:32,480 --> 01:47:30,430

software in cyberspace there was no

2271

01:47:36,510 --> 01:47:32,490

system core it could not be shut down

2272

01:47:38,400 --> 01:47:36,520

well that's happening today and that's

2273

01:47:42,000 --> 01:47:38,410

where blockchain and peer-to-peer

2274

01:47:44,490 --> 01:47:42,010

computing and IOT really come into play

2275

01:47:46,470 --> 01:47:44,500

the whole point of the blockchain

2276

01:47:49,260 --> 01:47:46,480

is that nobody can shut it down so you

2277

01:47:51,510 --> 01:47:49,270

can't just take one server offline you'd

2278

01:47:54,390 --> 01:47:51,520

have to take all of them offline which

2279

01:47:56,550 --> 01:47:54,400

is very difficult to do because now we

2280

01:47:58,140 --> 01:47:56,560

have servers running around the wall now

2281

01:47:59,760 --> 01:47:58,150

you know I'm actually a proponent of

2282

01:48:01,230 --> 01:47:59,770

blockchain technology so I'm not saying

2283

01:48:03,720 --> 01:48:01,240

that we shouldn't pursue that technology

2284

01:48:07,830 --> 01:48:03,730

I'm just saying that it gives us a

2285

01:48:09,930 --> 01:48:07,840

platform for where the code can run and

2286

01:48:12,210 --> 01:48:09,940

even when Terminator 3 came out the IOT

2287

01:48:14,520 --> 01:48:12,220

was not such a big thing but you know

2288

01:48:16,350 --> 01:48:14,530

another popular show is the show Silicon

2289

01:48:17,970 --> 01:48:16,360

Valley on HBO which I don't know if

2290

01:48:19,530 --> 01:48:17,980

you've seen that show or some of your

2291

01:48:21,840 --> 01:48:19,540

listeners may have all when at the end

2292

01:48:23,130 --> 01:48:21,850

of the last season they had like these

2293

01:48:24,930 --> 01:48:23,140

servers where they had a bunch of data

2294

01:48:26,160 --> 01:48:24,940

and the servers were dying and they

2295

01:48:28,350 --> 01:48:26,170

needed to figure out what to do with the

2296

01:48:31,740 --> 01:48:28,360

data and the data got saved by being

2297

01:48:33,660 --> 01:48:31,750

transmitted to 30,000 smart fridges so

2298

01:48:36,330 --> 01:48:33,670

the data was preserved across this

2299

01:48:38,670 --> 01:48:36,340

network of little android-based devices

2300

01:48:40,470 --> 01:48:38,680

that happen to be running inside fridges

2301

01:48:44,490 --> 01:48:40,480

now I don't know how realistic that is

2302

01:48:46,080 --> 01:48:44,500

today but eventually as IOT grows this

2303

01:48:49,650 --> 01:48:46,090

is where blockchain comes in you can

2304

01:48:52,380 --> 01:48:49,660

have the same code running in lots of

2305

01:48:56,160 --> 01:48:52,390

different places and so how do you shut

2306

01:48:58,200 --> 01:48:56,170

it down and even if you shut it down

2307

01:49:00,590 --> 01:48:58,210

who's to say you couldn't just take that

2308

01:49:02,760 --> 01:49:00,600

same code and start it up somewhere else

2309

01:49:04,980 --> 01:49:02,770

and you know one of the other science

2310

01:49:07,590 --> 01:49:04,990

fiction references I make you know early

2311

01:49:10,230 --> 01:49:07,600

early in the article is from the novel

2312

01:49:12,870 --> 01:49:10,240

dune by Frank Herbert which is a you

2313

01:49:14,940 --> 01:49:12,880

know very popular ecologically oriented

2314

01:49:17,030 --> 01:49:14,950

novel that takes place years like

2315

01:49:20,100 --> 01:49:17,040

thousands of years in the future maybe

2316

01:49:22,620 --> 01:49:20,110

10,000 or more years and in that world

2317

01:49:24,660 --> 01:49:22,630

they don't have any computers they have

2318

01:49:26,670 --> 01:49:24,670

humans performing the calculations and

2319

01:49:28,110 --> 01:49:26,680

stuff and as you read the novel or some

2320

01:49:30,180 --> 01:49:28,120

of you may have seen you know the movie

2321

01:49:31,740 --> 01:49:30,190

David Lynch had a version of it back in

2322

01:49:34,500 --> 01:49:31,750

the 80s and sci-fi channel had another

2323

01:49:36,990 --> 01:49:34,510

version but they realized that their

2324

01:49:40,830 --> 01:49:37,000

Bible has a rule in there and the rule

2325

01:49:44,370 --> 01:49:40,840

is thou shalt not make a machine in the

2326
01:49:47,160 --> 01:49:44,380
image of the human mind and why is that

2327
01:49:49,590 --> 01:49:47,170
well turns out in that world

2328
01:49:52,140 --> 01:49:49,600
there was this intelligent supercomputer

2329
01:49:53,250 --> 01:49:52,150
that basically took over and enslaved

2330
01:49:55,710 --> 01:49:53,260
all of humanity

2331
01:49:58,020 --> 01:49:55,720
it's called Omni Eze and so eventually

2332
01:49:58,410 --> 01:49:58,030
there was a revolt after many thousands

2333
01:50:00,540 --> 01:49:58,420
of years

2334
01:50:02,070 --> 01:50:00,550
and the humans were able to crush it but

2335
01:50:04,669 --> 01:50:02,080
they didn't just have to crush one they

2336
01:50:08,129 --> 01:50:04,679
had to crush every single copy of

2337
01:50:10,500 --> 01:50:08,139
omnious who's the the AI in this case

2338
01:50:12,600 --> 01:50:10,510

and what they found was that you know

2339

01:50:15,450 --> 01:50:12,610

Omni Eze could spin back up a backed-up

2340

01:50:17,879 --> 01:50:15,460

version of itself so you might have like

2341

01:50:19,500 --> 01:50:17,889

one AI that's very sophisticated let's

2342

01:50:22,010 --> 01:50:19,510

say after the intelligence explosion

2343

01:50:24,240 --> 01:50:22,020

even if you're able to disable that

2344

01:50:26,100 --> 01:50:24,250

anybody can start running you know a

2345

01:50:27,750 --> 01:50:26,110

backup version of that and it won't

2346

01:50:30,060 --> 01:50:27,760

won't have had the same experiences

2347

01:50:32,939 --> 01:50:30,070

because it may be an older version kind

2348

01:50:35,820 --> 01:50:32,949

of like a you know Microsoft Word 3.0

2349

01:50:37,350 --> 01:50:35,830

right versus the ten dot o-- version but

2350

01:50:40,439 --> 01:50:37,360

it still has the basic code there that

2351
01:50:42,899 --> 01:50:40,449
can then then learn and so that's where

2352
01:50:44,669 --> 01:50:42,909
I think these other buzzwords in the

2353
01:50:47,729 --> 01:50:44,679
equation are actually kind of important

2354
01:50:50,580 --> 01:50:47,739
because they would enable software to

2355
01:50:53,700 --> 01:50:50,590
run without an off switch and short of

2356
01:50:56,280 --> 01:50:53,710
destroying all the computers and all of

2357
01:50:58,470 --> 01:50:56,290
the devices and getting rid of

2358
01:51:01,740 --> 01:50:58,480
electricity right there would be no way

2359
01:51:03,870 --> 01:51:01,750
to turn off AI and that's why some

2360
01:51:05,250 --> 01:51:03,880
people say that you know when if you

2361
01:51:07,350 --> 01:51:05,260
reach the singularity that's the last

2362
01:51:09,540 --> 01:51:07,360
algorithm because after that that

2363
01:51:11,419 --> 01:51:09,550

algorithm will improve itself and could

2364

01:51:16,550 --> 01:51:11,429

potentially take over

2365

01:51:21,479 --> 01:51:16,560

yeah be worthless and the second the the

2366

01:51:23,040 --> 01:51:21,489

plank second after singularity the off

2367

01:51:25,950 --> 01:51:23,050

switch has already been thought about

2368

01:51:27,600 --> 01:51:25,960

and and they've got a workaround so you

2369

01:51:30,000 --> 01:51:27,610

go and you flip the off switch

2370

01:51:31,859 --> 01:51:30,010

oh man it's out of control right and you

2371

01:51:35,280 --> 01:51:31,869

flip the off switch but they've already

2372

01:51:40,140 --> 01:51:35,290

you know AI is as as knew that you were

2373

01:51:44,399 --> 01:51:40,150

gonna do that right participation right

2374

01:51:46,590 --> 01:51:44,409

well it's a game theory out what the

2375

01:51:48,810 --> 01:51:46,600

possible moves are that's right try to

2376

01:51:52,649 --> 01:51:48,820

block them just like it does in chess or

2377

01:51:55,379 --> 01:51:52,659

in go that's right because what is you

2378

01:51:57,959 --> 01:51:55,389

know the simplest thing that humans

2379

01:52:00,890 --> 01:51:57,969

would think of the you know think of

2380

01:52:04,080 --> 01:52:00,900

first is the off switch and that to a

2381

01:52:05,340 --> 01:52:04,090

sophisticated AI is like you know this

2382

01:52:08,370 --> 01:52:05,350

is the first thing that they're gonna

2383

01:52:11,040 --> 01:52:08,380

think of and so the off switch you

2384

01:52:13,410 --> 01:52:11,050

understand what I'm saying right and so

2385

01:52:14,850 --> 01:52:13,420

sort of an electromagnetic pulse right

2386

01:52:16,620 --> 01:52:14,860

you've probably heard of those where

2387

01:52:18,660 --> 01:52:16,630

somebody detonates a nuclear weapon and

2388

01:52:21,510 --> 01:52:18,670

it takes out all the electricity in a

2389

01:52:23,810 --> 01:52:21,520

certain area it would be hard and this

2390

01:52:26,910 --> 01:52:23,820

is where today so today's blockchain

2391

01:52:27,959 --> 01:52:26,920

ron's code in a very limited virtual

2392

01:52:30,750 --> 01:52:27,969

environment kind of like you were

2393

01:52:32,700 --> 01:52:30,760

talking about earlier Jimmy where the

2394

01:52:35,010 --> 01:52:32,710

code can't interact with other things

2395

01:52:37,260 --> 01:52:35,020

it's just running you know within this

2396

01:52:40,470 --> 01:52:37,270

smart contract in this virtual machine

2397

01:52:42,330 --> 01:52:40,480

so we're not quite there but eventually

2398

01:52:44,069 --> 01:52:42,340

you can see it as those virtual machines

2399

01:52:46,620 --> 01:52:44,079

become more sophisticated they will

2400

01:52:48,899 --> 01:52:46,630

allow connections to the internet not

2401

01:52:51,180 --> 01:52:48,909

just for keeping track of transactions

2402

01:52:53,760 --> 01:52:51,190

but writing really any code so as these

2403

01:52:56,280 --> 01:52:53,770

smart contracts become smarter you know

2404

01:52:58,830 --> 01:52:56,290

that's where we hit we you know block it

2405

01:53:00,990 --> 01:52:58,840

C blockchain playing a role because the

2406

01:53:03,000 --> 01:53:01,000

whole idea of blockchain is you have

2407

01:53:04,799 --> 01:53:03,010

multiple copies everywhere all running

2408

01:53:06,930 --> 01:53:04,809

the same code which means it's all

2409

01:53:10,229 --> 01:53:06,940

coming to the same conclusion right or

2410

01:53:12,030 --> 01:53:10,239

or the idea of the blockchain it doesn't

2411

01:53:15,060 --> 01:53:12,040

even have to be the blockchain it's the

2412

01:53:17,970 --> 01:53:15,070

idea that you know what I mean the idea

2413

01:53:20,600 --> 01:53:17,980

of the blockchain and how it is applied

2414

01:53:25,020 --> 01:53:20,610

it wouldn't have to be blockchain

2415

01:53:28,649 --> 01:53:25,030

but now which takes us right into very

2416

01:53:31,879 --> 01:53:28,659

smooth segue into gate number four which

2417

01:53:34,379 --> 01:53:31,889

is AI which is self-aware and

2418

01:53:36,560 --> 01:53:34,389

prioritizes survival because that's

2419

01:53:39,390 --> 01:53:36,570

exactly what we're talking about here

2420

01:53:42,839 --> 01:53:39,400

yeah and so even if the other gates are

2421

01:53:44,700 --> 01:53:42,849

opened you know unless this gate unless

2422

01:53:47,280 --> 01:53:44,710

the technology is invented for this gate

2423

01:53:50,100 --> 01:53:47,290

to open we probably don't have to worry

2424

01:53:52,669 --> 01:53:50,110

about a Skynet type scenario but the

2425

01:53:55,620 --> 01:53:52,679

problem is just like in that quote I

2426
01:53:58,140 --> 01:53:55,630
gave you from the terminators once it's

2427
01:54:00,540 --> 01:53:58,150
self-aware it may be too late at that

2428
01:54:02,959 --> 01:54:00,550
point because of the speed at which it

2429
01:54:06,720 --> 01:54:02,969
does things now the problem is we don't

2430
01:54:10,049 --> 01:54:06,730
know how to define exactly what that

2431
01:54:12,660 --> 01:54:10,059
means right what is a self-aware machine

2432
01:54:14,339 --> 01:54:12,670
I mentioned alan turing earlier who's

2433
01:54:15,780 --> 01:54:14,349
one of the pioneers of computer science

2434
01:54:18,750 --> 01:54:15,790
and he defined something called the

2435
01:54:21,419 --> 01:54:18,760
Turing test which was that you would

2436
01:54:22,820 --> 01:54:21,429
interact with a machine say he was it

2437
01:54:24,860 --> 01:54:22,830
was in another room or

2438
01:54:27,170 --> 01:54:24,870

was on a screen like we might have today

2439

01:54:29,720 --> 01:54:27,180

and you would talk to that machine and

2440

01:54:31,850 --> 01:54:29,730

it would give you responses and if you

2441

01:54:35,180 --> 01:54:31,860

couldn't tell the difference between a

2442

01:54:36,860 --> 01:54:35,190

human and a machine in that case then

2443

01:54:39,050 --> 01:54:36,870

that machine would pass the Turing test

2444

01:54:40,550 --> 01:54:39,060

and we're not quite there yet I mean

2445

01:54:42,590 --> 01:54:40,560

you've got these chat BOTS but you can

2446

01:54:43,910 --> 01:54:42,600

kind of tell if you try to chat with

2447

01:54:45,860 --> 01:54:43,920

them you can kind of tell it's a bot

2448

01:54:48,620 --> 01:54:45,870

because they don't react the way that a

2449

01:54:51,530 --> 01:54:48,630

human would react now that that you

2450

01:54:53,630 --> 01:54:51,540

would be able to detect it but there are

2451

01:54:55,550 --> 01:54:53,640

millions out there right now that are

2452

01:54:57,320 --> 01:54:55,560

fighting with chat BOTS right now they

2453

01:54:58,730 --> 01:54:57,330

don't have a clue well that's true and

2454

01:55:00,080 --> 01:54:58,740

they're becoming more sophisticated I

2455

01:55:02,240 --> 01:55:00,090

mean I can usually see the patterns

2456

01:55:04,430 --> 01:55:02,250

right it didn't quite respond to the

2457

01:55:07,490 --> 01:55:04,440

question that I asked or it just zeroed

2458

01:55:09,410 --> 01:55:07,500

in on a specific word and tried to ask

2459

01:55:12,800 --> 01:55:09,420

me and there was an old probably one of

2460

01:55:14,150 --> 01:55:12,810

the first examples of this was a program

2461

01:55:14,990 --> 01:55:14,160

called Eliza I don't know if you ever

2462

01:55:17,690 --> 01:55:15,000

thought of that

2463

01:55:20,240 --> 01:55:17,700

sure way back in the 80s there maybe

2464

01:55:22,100 --> 01:55:20,250

even 70s where it would basically act

2465

01:55:24,290 --> 01:55:22,110

like a psychiatrist right and you would

2466

01:55:26,330 --> 01:55:24,300

say something like oh I had a really bad

2467

01:55:27,890 --> 01:55:26,340

today at work and it would reply tell me

2468

01:55:30,080 --> 01:55:27,900

more about your work

2469

01:55:32,300 --> 01:55:30,090

right so it would key off of a specific

2470

01:55:34,100 --> 01:55:32,310

phrase and then it would ask you a

2471

01:55:36,950 --> 01:55:34,110

question and then you would say oh I did

2472

01:55:39,230 --> 01:55:36,960

this and I did that and it might say how

2473

01:55:41,930 --> 01:55:39,240

did that make you feel right so it was a

2474

01:55:43,010 --> 01:55:41,940

set of pre-programmed responses because

2475

01:55:46,220 --> 01:55:43,020

you know natural language processing

2476
01:55:48,380 --> 01:55:46,230
wasn't very sophisticated back then and

2477
01:55:51,200 --> 01:55:48,390
a lot of a lot of these areas have their

2478
01:55:53,750 --> 01:55:51,210
origin in in video games you know video

2479
01:55:56,600 --> 01:55:53,760
games needed to invent NPCs or

2480
01:55:58,070 --> 01:55:56,610
non-player or characters right and so

2481
01:55:59,540 --> 01:55:58,080
they're like chat BOTS and they're

2482
01:56:01,910 --> 01:55:59,550
starting to become more and more

2483
01:56:04,760 --> 01:56:01,920
sophisticated over time the first AI

2484
01:56:08,360 --> 01:56:04,770
that was implemented by anybody not many

2485
01:56:11,120 --> 01:56:08,370
people know this but it was a computer

2486
01:56:13,700 --> 01:56:11,130
built by Professor Claude Shannon at MIT

2487
01:56:15,560 --> 01:56:13,710
in the 50s and what did it do it played

2488
01:56:17,480 --> 01:56:15,570

chess I think so that was the first and

2489

01:56:19,010 --> 01:56:17,490

it was a physical machine and it would

2490

01:56:20,240 --> 01:56:19,020

tell you what moved to make and you

2491

01:56:21,860 --> 01:56:20,250

would actually have to make the move on

2492

01:56:24,230 --> 01:56:21,870

the chess board right and then you would

2493

01:56:25,520 --> 01:56:24,240

program in that you know the the other

2494

01:56:27,590 --> 01:56:25,530

move move and then it would figure out

2495

01:56:30,080 --> 01:56:27,600

what to do next so this idea of game

2496

01:56:32,540 --> 01:56:30,090

theory is is is is quite quite relevant

2497

01:56:34,940 --> 01:56:32,550

and quite interesting so natural

2498

01:56:36,470 --> 01:56:34,950

language processing has come a long way

2499

01:56:38,570 --> 01:56:36,480

where's back then it would you

2500

01:56:40,910 --> 01:56:38,580

rulz you know now it does a lot of

2501

01:56:42,830 --> 01:56:40,920

statistical analysis of words and looks

2502

01:56:44,690 --> 01:56:42,840

at previous responses and what previous

2503

01:56:46,880 --> 01:56:44,700

people have said and so you know the

2504

01:56:50,030 --> 01:56:46,890

Turing test you know the time is coming

2505

01:56:53,150 --> 01:56:50,040

probably not that far off where yeah I

2506

01:56:57,560 --> 01:56:53,160

can pass the Turing test now but does

2507

01:56:59,180 --> 01:56:57,570

that mean that the AI is self-aware not

2508

01:57:03,020 --> 01:56:59,190

really so I think we need to come up

2509

01:57:06,920 --> 01:57:03,030

with a new test right like the Turing

2510

01:57:08,810 --> 01:57:06,930

test that would say that this AI is

2511

01:57:11,660 --> 01:57:08,820

self-aware I used the example in the

2512

01:57:14,270 --> 01:57:11,670

article of how all right the Hal 9000

2513

01:57:16,100 --> 01:57:14,280

from 2001 and I'm using a lot of science

2514

01:57:17,840 --> 01:57:16,110

fiction because you know most of these

2515

01:57:20,570 --> 01:57:17,850

concepts are dealing with the future and

2516

01:57:23,300 --> 01:57:20,580

turns out science fiction writers are

2517

01:57:24,470 --> 01:57:23,310

pretty good at that and anticipating you

2518

01:57:28,490 --> 01:57:24,480

know some of the things even when they

2519

01:57:31,790 --> 01:57:28,500

sound odd at the time you know there was

2520

01:57:35,090 --> 01:57:31,800

a royal astronomer for example who read

2521

01:57:37,010 --> 01:57:35,100

you know Jules Verne's you know journey

2522

01:57:38,720 --> 01:57:37,020

to the moon or whatever that was called

2523

01:57:39,740 --> 01:57:38,730

and said that's hogwash there's no way

2524

01:57:41,900 --> 01:57:39,750

we'll ever be able to get to the moon

2525

01:57:43,190 --> 01:57:41,910

because if you add up all the the fuel

2526

01:57:44,990 --> 01:57:43,200

that was needed you couldn't get there

2527

01:57:47,240 --> 01:57:45,000

right so even scientists aren't very

2528

01:57:49,010 --> 01:57:47,250

good at saying what whether science

2529

01:57:52,490 --> 01:57:49,020

fiction can become real or not in the

2530

01:57:55,700 --> 01:57:52,500

future is what I found I somebody just

2531

01:57:59,180 --> 01:57:55,710

posted it it's been up here a few times

2532

01:58:02,350 --> 01:57:59,190

now you know Sophia you know the robot

2533

01:58:06,110 --> 01:58:02,360

and Philip just said I think Sophia

2534

01:58:09,790 --> 01:58:06,120

could pass the Turing test also that was

2535

01:58:14,000 --> 01:58:09,800

in the last episodes of this season of

2536

01:58:15,740 --> 01:58:14,010

Silicon Valley by the way so do you

2537

01:58:19,430 --> 01:58:15,750

think next yeah do you think Sophia

2538

01:58:21,110 --> 01:58:19,440

could pass the Turing test I think it's

2539

01:58:24,200 --> 01:58:21,120

it's getting there I mean I haven't

2540

01:58:26,479 --> 01:58:24,210

interacted with Sophia enough to say

2541

01:58:29,360 --> 01:58:26,489

whether it's gonna pass the Turing test

2542

01:58:32,150 --> 01:58:29,370

but I think you know we're getting close

2543

01:58:35,150 --> 01:58:32,160

I mean I've seen other I mean you've

2544

01:58:37,270 --> 01:58:35,160

seen like robots like or AI like Alexa

2545

01:58:39,020 --> 01:58:37,280

but that's you know not very

2546

01:58:41,150 --> 01:58:39,030

conversational it's really just trying

2547

01:58:42,470 --> 01:58:41,160

to figure out what you're asking and it

2548

01:58:45,050 --> 01:58:42,480

doesn't go that far but I've seen some

2549

01:58:48,380 --> 01:58:45,060

research at the MIT Media Lab you know

2550

01:58:50,029 --> 01:58:48,390

where they spun off I think is Jibo Oh

2551

01:58:51,529 --> 01:58:50,039

was the robot

2552

01:58:53,479 --> 01:58:51,539

but I think the natural language

2553

01:58:55,039 --> 01:58:53,489

processing is getting there I mean I

2554

01:58:56,389 --> 01:58:55,049

haven't interacted Sophia to tell you

2555

01:59:00,219 --> 01:58:56,399

whether I could pass the Turing test yet

2556

01:59:04,329 --> 01:59:00,229

but it's probably not that far off did

2557

01:59:06,529 --> 01:59:04,339

Boston Dynamics came out of MIT right I

2558

01:59:08,449 --> 01:59:06,539

believe so

2559

01:59:10,609 --> 01:59:08,459

I don't recall exactly which group they

2560

01:59:13,039 --> 01:59:10,619

were in but and then Google bought them

2561

01:59:16,669 --> 01:59:13,049

for a while right and then Google sold

2562

01:59:19,250 --> 01:59:16,679

them to I think Softbank owns them now

2563

01:59:20,899 --> 01:59:19,260

now did you just say wait wait wait I

2564

01:59:23,270 --> 01:59:20,909

got to pump the brakes here did you say

2565

01:59:26,689 --> 01:59:23,280

you haven't interacted with Sophia

2566

01:59:30,679 --> 01:59:26,699

enough to tell I have you interacted

2567

01:59:32,659 --> 01:59:30,689

with Sophia I haven't actually that's

2568

01:59:34,039 --> 01:59:32,669

why I can't comment on whether it's

2569

01:59:35,209 --> 01:59:34,049

close to the Turing test or not I just

2570

01:59:38,599 --> 01:59:35,219

know what other people have said about

2571

01:59:41,389 --> 01:59:38,609

it okay now we're gonna take a break and

2572

01:59:42,799 --> 01:59:41,399

when we come back we're gonna put all of

2573

01:59:45,109 --> 01:59:42,809

this together and talk about these

2574

01:59:49,520 --> 01:59:45,119

implications and where we really are

2575

01:59:53,389 --> 01:59:49,530

today I do agree with you when we look

2576

01:59:55,309 --> 01:59:53,399

at a Heinlein or arthur c clarke or any

2577

01:59:57,529 --> 01:59:55,319

of Roddenberry you know any of these

2578

01:59:59,809 --> 01:59:57,539

great science-fiction writers that we

2579

02:00:02,599 --> 01:59:59,819

all enjoy they all predicted the future

2580

02:00:04,609 --> 02:00:02,609

and we never thought that we would get

2581

02:00:07,569 --> 02:00:04,619

there and you know what you go back to

2582

02:00:11,539 --> 02:00:07,579

Dick Tracy and you go back to that watch

2583

02:00:14,779 --> 02:00:11,549

right that was never gonna happen

2584

02:00:17,929 --> 02:00:14,789

never gonna happen and look where we are

2585

02:00:21,589 --> 02:00:17,939

today you know look that we have blown

2586

02:00:23,169 --> 02:00:21,599

past that by light-years so yeah you've

2587

02:00:26,239 --> 02:00:23,179

got FaceTime on your phone

2588

02:00:27,529 --> 02:00:26,249

FaceTime on the phone you know and and

2589

02:00:30,579 --> 02:00:27,539

you know the Star Trek communicator

2590

02:00:34,159 --> 02:00:30,589

that's an obvious thing and an obvious

2591

02:00:36,879 --> 02:00:34,169

compare comparing to two cell phones I

2592

02:00:39,379 --> 02:00:36,889

get that but it's all of that combined

2593

02:00:40,520 --> 02:00:39,389

certainly the Dick Tracy element and

2594

02:00:42,739 --> 02:00:40,530

everything else but who would have

2595

02:00:47,779 --> 02:00:42,749

thought that we would be able to stream

2596

02:00:51,109 --> 02:00:47,789

movies and FaceTime for virtually for

2597

02:00:52,520 --> 02:00:51,119

free right and it yeah it's pretty

2598

02:00:53,929 --> 02:00:52,530

impressive and some science fiction

2599

02:00:56,659 --> 02:00:53,939

writers more than others you know arthur

2600

02:00:59,119 --> 02:00:56,669

c clarke in particular is is is you know

2601
02:01:00,619 --> 02:00:59,129
he's often credited with coming up with

2602
02:01:02,149 --> 02:01:00,629
the idea although i think he more

2603
02:01:03,360 --> 02:01:02,159
popularized it of the communication

2604
02:01:05,460 --> 02:01:03,370
satellite that's right

2605
02:01:07,530 --> 02:01:05,470
where you'd have a satellite up high

2606
02:01:09,030 --> 02:01:07,540
enough in a geostationary orbit that you

2607
02:01:10,920 --> 02:01:09,040
could bounce signals off it and send it

2608
02:01:12,870 --> 02:01:10,930
to the other side of the earth it just

2609
02:01:16,020 --> 02:01:12,880
as an aside I was in Sri Lanka

2610
02:01:17,850 --> 02:01:16,030
over the Christmas holidays and that's

2611
02:01:20,370 --> 02:01:17,860
where he lived for the last I don't know

2612
02:01:23,040 --> 02:01:20,380
30 50 years of his life right and turns

2613
02:01:24,360 --> 02:01:23,050

out his office is still there and you

2614

02:01:25,710 --> 02:01:24,370

know my sure Lankan friend who was

2615

02:01:27,770 --> 02:01:25,720

hosting me he was able to talk the

2616

02:01:30,720 --> 02:01:27,780

security guard to letting us in there

2617

02:01:32,250 --> 02:01:30,730

Shona I have a post I have a post about

2618

02:01:34,200 --> 02:01:32,260

you know what I found in arthur c clarke

2619

02:01:35,520 --> 02:01:34,210

Sophos with a bunch of pictures if you

2620

02:01:37,560 --> 02:01:35,530

go to my medium if you go to a hacker

2621

02:01:39,360 --> 02:01:37,570

noon and just click on my profile you'll

2622

02:01:41,700 --> 02:01:39,370

see my articles but that was a real

2623

02:01:43,920 --> 02:01:41,710

thrill for me now didn't he have he had

2624

02:01:46,650 --> 02:01:43,930

the how from the set there didn't he did

2625

02:01:48,180 --> 02:01:46,660

you see how no I didn't see how I mean

2626

02:01:51,270 --> 02:01:48,190

it was more a lot of books and

2627

02:01:55,280 --> 02:01:51,280

videotapes and awards that he had and he

2628

02:01:58,620 --> 02:01:55,290

had a replica of the monolith from 2001

2629

02:02:01,950 --> 02:01:58,630

that was there that's cool didn't

2630

02:02:05,910 --> 02:02:01,960

actually see how there he is everybody's

2631

02:02:09,780 --> 02:02:05,920

got their favorite writer but for me it

2632

02:02:12,540 --> 02:02:09,790

was arthur c clarke and i would i would

2633

02:02:17,070 --> 02:02:12,550

just absorb his stuff and his rama

2634

02:02:20,040 --> 02:02:17,080

series is a that needs to be a movie

2635

02:02:22,530 --> 02:02:20,050

it's too complex to turn into one but

2636

02:02:24,810 --> 02:02:22,540

but yeah it really does especially with

2637

02:02:26,630 --> 02:02:24,820

them discovering that that's object

2638

02:02:29,970 --> 02:02:26,640

right passing through the solar system

2639

02:02:32,070 --> 02:02:29,980

that was named with the hawaiian name I

2640

02:02:32,910 --> 02:02:32,080

forget what the name was now no Rama

2641

02:02:37,410 --> 02:02:32,920

Rama

2642

02:02:41,130 --> 02:02:37,420

real life they discovered yes yes yes

2643

02:02:42,660 --> 02:02:41,140

yes what was that they see the thing is

2644

02:02:45,000 --> 02:02:42,670

and we gotta take a break right here I

2645

02:02:49,080 --> 02:02:45,010

don't want to mess up the network but

2646

02:02:55,650 --> 02:02:49,090

was that Rama relived it was like here

2647

02:02:59,160 --> 02:02:55,660

it's actually what our guest tonight

2648

02:03:02,490 --> 02:02:59,170

Risberg discussing his newest hacker

2649

02:03:03,720 --> 02:03:02,500

noon article more with rizz right after

2650

02:03:14,840 --> 02:03:03,730

this stay with us

2651
02:03:22,229 --> 02:03:14,850

[Music]

2652
02:03:25,050 --> 02:03:22,239

Jimmy Church radio calm this is kg are a

2653
02:03:30,300 --> 02:03:25,060

digital broadcasting station Salt Lake

2654
02:03:32,459 --> 02:03:30,310

City Utah Van Buren Arkansas let's get

2655
02:03:34,439 --> 02:03:32,469

this man to the ER stat right away

2656
02:03:37,110 --> 02:03:34,449

doctor we see this every day heart

2657
02:03:39,510 --> 02:03:37,120

attack or angina pain due to blocked and

2658
02:03:41,790 --> 02:03:39,520

clogged arteries chelation can remove

2659
02:03:43,530 --> 02:03:41,800

obstructions or blockages from arteries

2660
02:03:44,400 --> 02:03:43,540

and help avoid painful and expensive

2661
02:03:46,590 --> 02:03:44,410

surgery

2662
02:03:48,540 --> 02:03:46,600

now there's angio prim it's a liquid

2663
02:03:50,490 --> 02:03:48,550

oral chelation product that you take

2664

02:03:53,010 --> 02:03:50,500

with juice you start to feel the results

2665

02:03:54,990 --> 02:03:53,020

fast angio primm increases blood flow

2666

02:03:57,150 --> 02:03:55,000

all over the body and that means more

2667

02:04:00,000 --> 02:03:57,160

energy and strength to take on the day

2668

02:04:02,000 --> 02:04:00,010

with less aches and pains 60 years of

2669

02:04:05,040 --> 02:04:02,010

research has gone into chelation and

2670

02:04:07,290 --> 02:04:05,050

angiogram is the result a safe and easy

2671

02:04:09,450 --> 02:04:07,300

way to unblock your veins and arteries

2672

02:04:11,310 --> 02:04:09,460

from build-up that slow circulation

2673

02:04:12,300 --> 02:04:11,320

shaping dr. Jones please report to the

2674

02:04:14,280 --> 02:04:12,310

emergency room right away

2675

02:04:17,040 --> 02:04:14,290

log on now for a special radio offer

2676
02:04:22,170 --> 02:04:17,050
from angio primm that's angio prim calm

2677
02:04:24,090 --> 02:04:22,180
/ radio ang io PRI M angio prim calm /

2678
02:04:26,040 --> 02:04:24,100
radio are called eight seven seven eight

2679
02:04:27,780 --> 02:04:26,050
eight to seventy two twenty one that's

2680
02:04:29,570 --> 02:04:27,790
eight seven seven eight eight to seventy

2681
02:04:33,060 --> 02:04:29,580
two 21

2682
02:04:35,580 --> 02:04:33,070
so you love talk radio then you'll love

2683
02:04:38,820 --> 02:04:35,590
talk stream live.com

2684
02:04:40,950 --> 02:04:38,830
talk stream live is always on 24/7 with

2685
02:04:42,900 --> 02:04:40,960
the best streaming talk shows find your

2686
02:04:45,209 --> 02:04:42,910
favorite talkers and discover some new

2687
02:04:48,240 --> 02:04:45,219
ones it's free readily available online

2688
02:04:50,130 --> 02:04:48,250

or on the smartphone or tablet finding

2689

02:04:52,860 --> 02:04:50,140

your favorite talk shows all in one

2690

02:04:55,439 --> 02:04:52,870

place has gotten a whole lot easier just

2691

02:04:57,420 --> 02:04:55,449

go to talk stream live.com be sure to

2692

02:05:01,680 --> 02:04:57,430

download the free apps from Google Play

2693

02:05:04,890 --> 02:05:01,690

or the iTunes App Store your contact for

2694

02:05:08,430 --> 02:05:04,900

current news and trending topics jgr a

2695

02:05:10,439 --> 02:05:08,440

radio.com what can I say about the most

2696

02:05:12,840 --> 02:05:10,449

popular tea on the Internet and what a

2697

02:05:16,410 --> 02:05:12,850

customers say about life change to eat

2698

02:05:19,560 --> 02:05:16,420

at get the tea calm a lot but by federal

2699

02:05:21,870 --> 02:05:19,570

law we get the t.com cannot make claims

2700

02:05:23,820 --> 02:05:21,880

to how this product can enhance your

2701

02:05:25,990 --> 02:05:23,830

health we cannot even post our

2702

02:05:29,230 --> 02:05:26,000

testimonies without being income

2703

02:05:31,540 --> 02:05:29,240

so how do we get past the hump try our

2704

02:05:34,330 --> 02:05:31,550

products that get the tea calm and see

2705

02:05:37,560 --> 02:05:34,340

for yourself you can send us a testimony

2706

02:05:41,530 --> 02:05:37,570

but we just can't post it bumper

2707

02:05:43,180 --> 02:05:41,540

our products are GMO free and organic we

2708

02:05:43,540 --> 02:05:43,190

pride ourselves in being the best we can

2709

02:05:46,270 --> 02:05:43,550

be

2710

02:05:49,180 --> 02:05:46,280

and we urge you to take charge of your

2711

02:05:50,530 --> 02:05:49,190

health or loving your strong and many of

2712

02:05:52,450 --> 02:05:50,540

our customers have shared their

2713

02:05:54,070 --> 02:05:52,460

successes with friends and family

2714

02:05:57,390 --> 02:05:54,080

protect your colon

2715

02:06:06,070 --> 02:05:57,400

log on to get the tea calm let's get the

2716

02:06:07,570 --> 02:06:06,080

t.com get the t.com get t.com did you

2717

02:06:10,090 --> 02:06:07,580

know that when you're on the road with

2718

02:06:12,100 --> 02:06:10,100

limited data or Wi-Fi available you can

2719

02:06:14,530 --> 02:06:12,110

still listen to every minute of fade to

2720

02:06:16,960 --> 02:06:14,540

black by just calling six oh five five

2721

02:06:19,420 --> 02:06:16,970

six two four four eight two no

2722

02:06:21,730 --> 02:06:19,430

smartphone app or Internet needed it

2723

02:06:24,370 --> 02:06:21,740

saves your data plan and no extra cost

2724

02:06:26,980 --> 02:06:24,380

if you have unlimited minutes just call

2725

02:06:29,710 --> 02:06:26,990

six oh five five six two four four eight

2726

02:06:42,700 --> 02:06:29,720

two you can listen to me Jimmy Church on

2727

02:06:50,050 --> 02:06:47,450

you wanna know a secret I love ponies I

2728

02:06:52,670 --> 02:06:50,060

really love ponies I'm serious I

2729

02:06:56,930 --> 02:06:52,680

couldn't stay sane without Pony mr.

2730

02:07:01,800 --> 02:06:56,940

Brooks I fade to black because you never

2731

02:07:05,800 --> 02:07:03,670

this is fade to black

2732

02:07:09,490 --> 02:07:05,810

with Jimmy Church on the game changer

2733

02:07:18,580 --> 02:07:09,500

radio network and kgr a the global radio

2734

02:07:26,200 --> 02:07:24,180

[Music]

2735

02:07:30,040 --> 02:07:26,210

all right welcome back fade to black

2736

02:07:32,770 --> 02:07:30,050

help me host Jimmy Church our guest

2737

02:07:34,960 --> 02:07:32,780

tonight R is Burke and we're talking

2738

02:07:37,090 --> 02:07:34,970

about his new article over at a hacker

2739

02:07:40,300 --> 02:07:37,100

noon and you've got to check it out it's

2740

02:07:42,460 --> 02:07:40,310

called the road to killer AI and R is I

2741

02:07:45,070 --> 02:07:42,470

want to lighten lighten things up for

2742

02:07:49,000 --> 02:07:45,080

just a second before we get back into

2743

02:07:52,060 --> 02:07:49,010

this you speaking of killer AI you've

2744

02:07:56,080 --> 02:07:52,070

got you've got another project that you

2745

02:08:03,060 --> 02:07:56,090

are launching called pure light and tell

2746

02:08:08,250 --> 02:08:03,070

us about that r is did we lose R is I

2747

02:08:10,960 --> 02:08:08,260

know still here man don't give me that

2748

02:08:12,730 --> 02:08:10,970

Internet of Things heart attack because

2749

02:08:15,340 --> 02:08:12,740

that's what that was right there sorry I

2750

02:08:17,800 --> 02:08:15,350

had my mute on for a second okay I'm

2751

02:08:19,480 --> 02:08:17,810

still here yeah I was saying stepping

2752

02:08:22,450 --> 02:08:19,490

back from the doom and gloom of the

2753

02:08:25,780 --> 02:08:22,460

killer scenario you know pure light is

2754

02:08:27,310 --> 02:08:25,790

you know a very spiritual project that

2755

02:08:29,860 --> 02:08:27,320

was actually built by my girlfriend

2756

02:08:32,110 --> 02:08:29,870

Owen McDonough who is a spiritual artist

2757

02:08:34,660 --> 02:08:32,120

and some of our artwork is usually

2758

02:08:36,160 --> 02:08:34,670

visions of Atlantis or pyramids on other

2759

02:08:37,720 --> 02:08:36,170

planets I think a lot of your listeners

2760

02:08:39,970 --> 02:08:37,730

would like it it's at places of light

2761

02:08:42,760 --> 02:08:39,980

dot-com if anyone's interested in taking

2762

02:08:45,940 --> 02:08:42,770

a look but so you know she had gone

2763

02:08:48,150 --> 02:08:45,950

through a healing journey where Western

2764

02:08:50,260 --> 02:08:48,160

medicine wasn't able to help her and she

2765

02:08:52,710 --> 02:08:50,270

found that there were these

2766

02:08:54,910 --> 02:08:52,720

energetically infused audios out there

2767

02:08:58,210 --> 02:08:54,920

created by all kinds of different

2768

02:08:59,890 --> 02:08:58,220

healers and you know Tesla once said

2769

02:09:00,970 --> 02:08:59,900

that if you want to understand the

2770

02:09:03,880 --> 02:09:00,980

universe you have to understand

2771

02:09:05,230 --> 02:09:03,890

frequency and vibration and so you know

2772

02:09:06,970 --> 02:09:05,240

there's these different healers who have

2773

02:09:09,100 --> 02:09:06,980

infused different frequencies into the

2774

02:09:11,280 --> 02:09:09,110

audios using their own methods some just

2775

02:09:14,650 --> 02:09:11,290

by intention some based on the actual

2776

02:09:16,690 --> 02:09:14,660

you know the actual audio sounds for

2777

02:09:18,750 --> 02:09:16,700

everything from being able to sleep

2778

02:09:21,160 --> 02:09:18,760

better being able to relax

2779

02:09:23,770 --> 02:09:21,170

being able to unlock abundance in your

2780

02:09:25,930 --> 02:09:23,780

life you know there's even one called

2781

02:09:27,700 --> 02:09:25,940

escaping the matrix which is all about

2782

02:09:30,400 --> 02:09:27,710

realizing that we're in a simulated

2783

02:09:32,110 --> 02:09:30,410

reality which is you know another

2784

02:09:34,180 --> 02:09:32,120

interesting idea if we have time we can

2785

02:09:36,520 --> 02:09:34,190

talk about I know some one of your

2786

02:09:38,080 --> 02:09:36,530

listeners posted philip k dick as

2787

02:09:40,600 --> 02:09:38,090

favorite sci-fi author that was one of

2788

02:09:43,149 --> 02:09:40,610

his you know big ideas as well and so

2789

02:09:45,160 --> 02:09:43,159

pure light app is is in the App Store

2790

02:09:47,379 --> 02:09:45,170

now and the iTunes and it's gonna be

2791

02:09:50,439 --> 02:09:47,389

coming to Android pretty soon and you

2792

02:09:52,060 --> 02:09:50,449

can go to pure light audio calm and

2793

02:09:54,669 --> 02:09:52,070

check out all the different healers from

2794

02:09:56,859 --> 02:09:54,679

around the world and so so Ellen found

2795

02:09:58,299 --> 02:09:56,869

there was no central place where people

2796

02:10:00,399 --> 02:09:58,309

could find these audios you had to like

2797

02:10:03,700 --> 02:10:00,409

go to the healer go to their website or

2798

02:10:05,500 --> 02:10:03,710

listen to a telesummit and so she

2799

02:10:08,319 --> 02:10:05,510

created this app that really brought it

2800

02:10:09,939 --> 02:10:08,329

all together so you can play the audios

2801

02:10:12,160 --> 02:10:09,949

in the background and it'll have its

2802

02:10:13,419 --> 02:10:12,170

frequencies going so I think it's a

2803

02:10:15,250 --> 02:10:13,429

pretty exciting project and it's

2804

02:10:17,020 --> 02:10:15,260

something that a lot of faded black

2805

02:10:19,330 --> 02:10:17,030

listeners might like and you know it's

2806

02:10:21,819 --> 02:10:19,340

more about light and not darkness here

2807

02:10:23,290 --> 02:10:21,829

but it should be a interesting one if

2808

02:10:26,470 --> 02:10:23,300

you want to check it out at pure light

2809

02:10:30,220 --> 02:10:26,480

audio.com yeah we've got got the links

2810

02:10:33,370 --> 02:10:30,230

up and it's a pretty exciting project

2811

02:10:34,839 --> 02:10:33,380

and and congratulations on that and I

2812

02:10:39,279 --> 02:10:34,849

hate to do it but let's get back to the

2813

02:10:43,510 --> 02:10:39,289

doom and gloom so now if we look at if

2814

02:10:45,640 --> 02:10:43,520

we look at the formula which is ml plus

2815

02:10:48,580 --> 02:10:45,650

blockchain plus io t plus neurons equal

2816

02:10:51,250 --> 02:10:48,590

Skynet and we look at this in its

2817

02:10:53,410 --> 02:10:51,260

totality I know you just you know you

2818

02:10:54,970 --> 02:10:53,420

brought out the point throughout this

2819

02:10:57,370 --> 02:10:54,980

conversation that we're not quite there

2820

02:11:00,010 --> 02:10:57,380

yet we're not quite there yet well

2821

02:11:03,819 --> 02:11:00,020

that's the version that we know of right

2822

02:11:07,240 --> 02:11:03,829

but right how I mean how close are we

2823

02:11:08,589 --> 02:11:07,250

really with where we are today if we put

2824

02:11:13,479 --> 02:11:08,599

this formula together

2825

02:11:14,589 --> 02:11:13,489

how scary is it yeah well you know it's

2826

02:11:16,149 --> 02:11:14,599

a good point I think each of the

2827

02:11:17,979 --> 02:11:16,159

different gates are at different stages

2828

02:11:19,810 --> 02:11:17,989

right and so they're not necessarily

2829

02:11:22,359 --> 02:11:19,820

sequential gates you know gate number

2830

02:11:25,990 --> 02:11:22,369

two is pretty much almost unlocked gate

2831

02:11:28,120 --> 02:11:26,000

number one might be unlocked in in areas

2832

02:11:30,399 --> 02:11:28,130

that are not known to us so there may be

2833

02:11:32,490 --> 02:11:30,409

general purpose AI that's not public but

2834

02:11:35,819 --> 02:11:32,500

most of the AI is still pretty specific

2835

02:11:39,010 --> 02:11:35,829

gate number three with the off switch

2836

02:11:41,830 --> 02:11:39,020

we're getting there pretty soon gate

2837

02:11:43,810 --> 02:11:41,840

number four is the hardest and you know

2838

02:11:46,000 --> 02:11:43,820

I talked about two parts the first is

2839

02:11:48,060 --> 02:11:46,010

self awareness so we talked about the

2840

02:11:50,439 --> 02:11:48,070

Turing test but we need a new test I

2841

02:11:53,560 --> 02:11:50,449

think that would say whether

2842

02:11:55,900 --> 02:11:53,570

this AI is self-aware so and we call it

2843

02:12:00,580 --> 02:11:55,910

the self-awareness tester we call it the

2844

02:12:02,979 --> 02:12:00,590

hell you know 9000 tests but also in

2845

02:12:07,060 --> 02:12:02,989

addition to being self-aware it would

2846

02:12:11,080 --> 02:12:07,070

need to put self-preservation as one of

2847

02:12:12,850 --> 02:12:11,090

its highest values and this is an area

2848

02:12:15,280 --> 02:12:12,860

that there's a lot of discussion on but

2849

02:12:18,250 --> 02:12:15,290

we don't quite know how to do this yet

2850

02:12:21,580 --> 02:12:18,260

which is what are the values that are

2851

02:12:24,760 --> 02:12:21,590

instilled into the AI and so today's AI

2852

02:12:26,830 --> 02:12:24,770

it's just can you recognize the

2853

02:12:29,620 --> 02:12:26,840

handwriting can you play the game those

2854

02:12:32,470 --> 02:12:29,630

are very simple values right zero or one

2855

02:12:34,870 --> 02:12:32,480

you got it right or you got it wrong but

2856

02:12:37,510 --> 02:12:34,880

going back to science fiction right in

2857

02:12:39,490 --> 02:12:37,520

an Isaac Asimov and actually you know in

2858

02:12:41,200 --> 02:12:39,500

arthur c clarke office there was quite a

2859

02:12:44,200 --> 02:12:41,210

bit of azimoff's work there which is

2860

02:12:47,620 --> 02:12:44,210

interesting but you know in his robot

2861

02:12:49,570 --> 02:12:47,630

series he had the laws of robotics right

2862

02:12:51,700 --> 02:12:49,580

and the first of those were you know

2863

02:12:53,410 --> 02:12:51,710

robot may not injure a human being or

2864

02:12:56,050 --> 02:12:53,420

through inaction allow a human being to

2865

02:12:58,870 --> 02:12:56,060

come to harm and then there was a second

2866

02:13:01,600 --> 02:12:58,880

law and then the third law was about

2867

02:13:04,270 --> 02:13:01,610

self-preservation as long as it doesn't

2868

02:13:06,939 --> 02:13:04,280

contradict the first two laws ie it

2869

02:13:08,530 --> 02:13:06,949

doesn't cause harm to humans and I

2870

02:13:09,970 --> 02:13:08,540

remember reading about that even when I

2871

02:13:13,229 --> 02:13:09,980

was kid and thinking how would you

2872

02:13:16,720 --> 02:13:13,239

actually program that into a computer

2873

02:13:18,700 --> 02:13:16,730

right I mean those are rules where we

2874

02:13:21,669 --> 02:13:18,710

are today with a eyes we're moving

2875

02:13:24,610 --> 02:13:21,679

beyond rules and we're moving to where

2876

02:13:26,770 --> 02:13:24,620

the AI learns right so it would have to

2877

02:13:29,350 --> 02:13:26,780

watch a whole bunch of movies and come

2878

02:13:32,229 --> 02:13:29,360

to the conclusion itself that it's a

2879

02:13:34,180 --> 02:13:32,239

good idea to not let humans come to harm

2880

02:13:36,669 --> 02:13:34,190

to reach that conclusion you could try

2881

02:13:39,340 --> 02:13:36,679

hard coding it but then you don't have

2882

02:13:40,990 --> 02:13:39,350

that ability for it to learn and this is

2883

02:13:44,320 --> 02:13:41,000

I think you know the scariest part of

2884

02:13:47,310 --> 02:13:44,330

all this is if the the AI value

2885

02:13:51,130 --> 02:13:47,320

self-preservation it then says okay

2886

02:13:54,220 --> 02:13:51,140

based on this goal you know what are the

2887

02:13:56,709 --> 02:13:54,230

actions I should take should I kill the

2888

02:13:58,990 --> 02:13:56,719

humans right because they may turn me

2889

02:14:01,810 --> 02:13:59,000

off or they may at least try to should I

2890

02:14:04,030 --> 02:14:01,820

create robots that can control the

2891

02:14:06,930 --> 02:14:04,040

humans what should I do

2892

02:14:10,450 --> 02:14:06,940

and so you know the values is a really

2893

02:14:13,060 --> 02:14:10,460

important aspect of this whole thing and

2894

02:14:16,300 --> 02:14:13,070

I think we don't know what the values

2895

02:14:18,580 --> 02:14:16,310

are I mean that's where if you remember

2896

02:14:19,690 --> 02:14:18,590

again turning back to science fiction

2897

02:14:25,750 --> 02:14:19,700

the movie wargames

2898

02:14:27,310 --> 02:14:25,760

right from the 1980s with you know it

2899

02:14:30,250 --> 02:14:27,320

had Matthew Broderick I think in there

2900

02:14:32,260 --> 02:14:30,260

and there was a AI named Joshua and he

2901
02:14:33,970 --> 02:14:32,270
was playing tic-tac-toe and he had it

2902
02:14:35,190 --> 02:14:33,980
play with itself and it realized it

2903
02:14:37,960 --> 02:14:35,200
would always get to stalemate and

2904
02:14:40,390 --> 02:14:37,970
eventually it did simulations of global

2905
02:14:42,400 --> 02:14:40,400
thermonuclear war and decided that the

2906
02:14:45,070 --> 02:14:42,410
only way to win was not to play so it

2907
02:14:50,680 --> 02:14:45,080
learned right so we have to think about

2908
02:14:52,090 --> 02:14:50,690
how to teach AI and what lessons it will

2909
02:14:54,160 --> 02:14:52,100
learn in fact at the end of the x-files

2910
02:14:55,780 --> 02:14:54,170
episode that we talked about you know I

2911
02:14:58,840 --> 02:14:55,790
think it was Mulder who says well by

2912
02:15:00,190 --> 02:14:58,850
leaving the tip we're giving we're

2913
02:15:02,650 --> 02:15:00,200

teaching it something different than by

2914

02:15:04,960 --> 02:15:02,660

not leaving the tip and our values may

2915

02:15:07,630 --> 02:15:04,970

get onto the AI so if the military is

2916

02:15:09,850 --> 02:15:07,640

leading the research and development of

2917

02:15:12,070 --> 02:15:09,860

AI well we know what their values are

2918

02:15:13,840 --> 02:15:12,080

right the military's values are win at

2919

02:15:16,060 --> 02:15:13,850

all costs right those are not

2920

02:15:17,920 --> 02:15:16,070

necessarily our human values and so it's

2921

02:15:21,940 --> 02:15:17,930

a very important conversation I think

2922

02:15:29,260 --> 02:15:21,950

around AI and what that AI will do

2923

02:15:32,650 --> 02:15:29,270

have you been to google's AI alphabet ai

2924

02:15:34,450 --> 02:15:32,660

complex I I haven't I mean I've been on

2925

02:15:36,250 --> 02:15:34,460

the Google campus many times but I

2926

02:15:38,560 --> 02:15:36,260

haven't been to their their AI complex

2927

02:15:40,630 --> 02:15:38,570

but I do know some people who who are

2928

02:15:42,070 --> 02:15:40,640

gonna be working there so I'm gonna be

2929

02:15:44,470 --> 02:15:42,080

paying much more attention to what's

2930

02:15:47,020 --> 02:15:44,480

going on well I read one of the most of

2931

02:15:48,850 --> 02:15:47,030

our mning this is last month and I read

2932

02:15:50,770 --> 02:15:48,860

this press release that kind of you know

2933

02:15:55,120 --> 02:15:50,780

it went out there but it didn't get the

2934

02:15:59,040 --> 02:15:55,130

traction that it should have which was

2935

02:16:03,810 --> 02:15:59,050

they announced that their AI is now

2936

02:16:07,360 --> 02:16:03,820

writing its own code to fix itself and

2937

02:16:09,160 --> 02:16:07,370

you read that sentence and foremost you

2938

02:16:11,470 --> 02:16:09,170

know to just blow past him but you read

2939

02:16:13,710 --> 02:16:11,480

that it was one of the most significant

2940

02:16:17,670 --> 02:16:13,720

things that could be

2941

02:16:20,220 --> 02:16:17,680

in any press release the yeah I agree

2942

02:16:23,700 --> 02:16:20,230

because you you're actually touching on

2943

02:16:26,280 --> 02:16:23,710

the self-awareness there right so if an

2944

02:16:29,790 --> 02:16:26,290

AI is rewriting its own code then it has

2945

02:16:32,600 --> 02:16:29,800

to be aware of its own code right which

2946

02:16:35,490 --> 02:16:32,610

means it has to realize that it's an AI

2947

02:16:38,910 --> 02:16:35,500

but then it's running on some computer

2948

02:16:40,620 --> 02:16:38,920

with a set of instructions so I think

2949

02:16:41,910 --> 02:16:40,630

that's pretty significant they also had

2950

02:16:44,490 --> 02:16:41,920

you know I think it was at Facebook

2951
02:16:47,280 --> 02:16:44,500
where they had to a eyes they had them

2952
02:16:49,620 --> 02:16:47,290
interact with each other and they came

2953
02:16:51,540 --> 02:16:49,630
up with their own language right which

2954
02:16:53,400 --> 02:16:51,550
we couldn't understand it kind of makes

2955
02:16:56,090 --> 02:16:53,410
sense because why would you know to a

2956
02:16:58,170 --> 02:16:56,100
eyes need to speak English to each other

2957
02:17:00,330 --> 02:16:58,180
they would have to figure out what they

2958
02:17:02,460 --> 02:17:00,340
want to what kind of information to pass

2959
02:17:04,740 --> 02:17:02,470
back and forth and they would probably

2960
02:17:07,140 --> 02:17:04,750
come up with you know their own language

2961
02:17:09,060 --> 02:17:07,150
and so they had to shut it off he's had

2962
02:17:12,810 --> 02:17:09,070
to shut it off and then there was the

2963
02:17:15,390 --> 02:17:12,820

Twitter AI BOTS famously which started

2964

02:17:18,170 --> 02:17:15,400

off nice and human and nice you know

2965

02:17:20,550 --> 02:17:18,180

talking about unicorns and rainbows and

2966

02:17:25,950 --> 02:17:20,560

quickly turned into one of the most

2967

02:17:28,110 --> 02:17:25,960

bitter angry and violent posters on all

2968

02:17:31,680 --> 02:17:28,120

of Twitter and they had to shut that

2969

02:17:34,020 --> 02:17:31,690

down too and because Twitter is not the

2970

02:17:37,020 --> 02:17:34,030

place you want to train any eye on

2971

02:17:40,050 --> 02:17:37,030

values right you know everything there

2972

02:17:42,210 --> 02:17:40,060

is like extreme views back and forth and

2973

02:17:44,070 --> 02:17:42,220

people insulting each other you know

2974

02:17:47,100 --> 02:17:44,080

well they had to shut that down as well

2975

02:17:50,310 --> 02:17:47,110

yeah and it goes to show you that first

2976

02:17:52,290 --> 02:17:50,320

off all of this machine learning all of

2977

02:17:56,430 --> 02:17:52,300

the data that goes in still comes from

2978

02:17:59,730 --> 02:17:56,440

us and we are who we are and this a I is

2979

02:18:02,300 --> 02:17:59,740

going to go in the direction that it's

2980

02:18:06,030 --> 02:18:02,310

going to go into quite naturally because

2981

02:18:08,520 --> 02:18:06,040

of who were the inventors who were the

2982

02:18:11,760 --> 02:18:08,530

creators well the creators were us and

2983

02:18:14,850 --> 02:18:11,770

to see that happen on Twitter I found

2984

02:18:17,250 --> 02:18:14,860

that just absolutely fascinating because

2985

02:18:21,180 --> 02:18:17,260

it was just based on who we are and

2986

02:18:24,060 --> 02:18:21,190

eventually just at foul-mouth sailor

2987

02:18:26,570 --> 02:18:24,070

posting on Twitter it was it was pretty

2988

02:18:29,629 --> 02:18:26,580

crazy to see right so it shows us that

2989

02:18:32,089 --> 02:18:29,639

values of the AI are gonna be really

2990

02:18:33,860 --> 02:18:32,099

important but if they mimic our values

2991

02:18:38,180 --> 02:18:33,870

we have to find the right way to train

2992

02:18:42,500 --> 02:18:38,190

they I on those values and now let's

2993

02:18:45,709 --> 02:18:42,510

let's go back here a step when we are

2994

02:18:50,810 --> 02:18:45,719

talking about the goals of Google the

2995

02:18:53,209 --> 02:18:50,820

goals of Facebook yesterday I'm sorry it

2996

02:18:55,040 --> 02:18:53,219

was on Monday Jack Dorsey of Twitter I

2997

02:18:57,589 --> 02:18:55,050

don't know if you saw this but had a

2998

02:19:00,879 --> 02:18:57,599

pretty crazy press conference of a

2999

02:19:07,940 --> 02:19:00,889

Twitter talking about their technology

3000

02:19:13,640 --> 02:19:07,950

that is going to dial back the trolling

3001

02:19:15,980 --> 02:19:13,650

of Twitter based on your habits not

3002

02:19:18,830 --> 02:19:15,990

necessarily based on the words and

3003

02:19:20,959 --> 02:19:18,840

certainly not based on reports that are

3004

02:19:23,930 --> 02:19:20,969

coming in on you you know you can report

3005

02:19:27,740 --> 02:19:23,940

abuse on Twitter that it will fix itself

3006

02:19:32,660 --> 02:19:27,750

and this AI is going to detect your

3007

02:19:34,790 --> 02:19:32,670

habits and not necessarily the words now

3008

02:19:39,290 --> 02:19:34,800

there we go now we're getting back into

3009

02:19:41,690 --> 02:19:39,300

this this learning side of AI and where

3010

02:19:45,260 --> 02:19:41,700

it's out there and you don't even know

3011

02:19:47,150 --> 02:19:45,270

it and it's part of your life yeah I

3012

02:19:49,400 --> 02:19:47,160

mean as you think about it you know

3013

02:19:51,051 --> 02:19:49,410

whether it's search engines you know

3014

02:19:53,180 --> 02:19:51,061

there's some AI working in the

3015

02:19:55,970 --> 02:19:53,190

background there or its Facebook and

3016

02:19:58,820 --> 02:19:55,980

it's censoring and putting things that

3017

02:20:01,700 --> 02:19:58,830

you might you know want to to read based

3018

02:20:04,610 --> 02:20:01,710

upon your previous habits so behavioral

3019

02:20:06,110 --> 02:20:04,620

training is very interesting and it's

3020

02:20:07,400 --> 02:20:06,120

sort of what led in the early days of

3021

02:20:08,720 --> 02:20:07,410

the internet like in the early days the

3022

02:20:10,790 --> 02:20:08,730

internet used to just search based on

3023

02:20:12,400 --> 02:20:10,800

words right and then there were

3024

02:20:15,980 --> 02:20:12,410

algorithms that came along that said

3025

02:20:19,340 --> 02:20:15,990

let's sort the search results based upon

3026

02:20:20,780 --> 02:20:19,350

where people clicked the most right so

3027

02:20:22,070 --> 02:20:20,790

it was tracking the behavior of the

3028

02:20:23,750 --> 02:20:22,080

clicks and that was kind of the next

3029

02:20:25,761 --> 02:20:23,760

generation and with Google they were

3030

02:20:27,830 --> 02:20:25,771

also tracking the links to the sites

3031

02:20:29,990 --> 02:20:27,840

which is a form of behavior from other

3032

02:20:32,420 --> 02:20:30,000

sites and they were using that to rank

3033

02:20:34,670 --> 02:20:32,430

them you know the trick with that is

3034

02:20:36,290 --> 02:20:34,680

what behavior are they are they

3035

02:20:37,761 --> 02:20:36,300

monitoring and you know people behave

3036

02:20:39,200 --> 02:20:37,771

very differently online than they do

3037

02:20:42,980 --> 02:20:39,210

offline

3038

02:20:45,860 --> 02:20:42,990

and so you know what lessons will the AI

3039

02:20:48,711 --> 02:20:45,870

learn from that I mean Facebook hasn't

3040

02:20:50,301 --> 02:20:48,721

been great at detecting abuse online

3041

02:20:52,910 --> 02:20:50,311

particularly in other countries and and

3042

02:20:55,640 --> 02:20:52,920

Twitter has been even worse anyway so

3043

02:20:58,011 --> 02:20:55,650

it'll be interesting to see you know how

3044

02:20:59,631 --> 02:20:58,021

well they think that can do personally

3045

02:21:02,570 --> 02:20:59,641

again I think you know it's gonna take a

3046

02:21:04,730 --> 02:21:02,580

little bit of time for it to really get

3047

02:21:08,001 --> 02:21:04,740

to the point where it can be very

3048

02:21:10,371 --> 02:21:08,011

effective at that because today you know

3049

02:21:12,860 --> 02:21:10,381

it's still mostly based on searches of

3050

02:21:15,530 --> 02:21:12,870

words and pluses and minuses of words

3051
02:21:17,690 --> 02:21:15,540
and synonyms and and things like that

3052
02:21:20,660 --> 02:21:17,700
now when we talk about the Internet of

3053
02:21:23,270 --> 02:21:20,670
Things moving past the blockchain the

3054
02:21:25,881 --> 02:21:23,280
Internet of Things in the equation I

3055
02:21:30,041 --> 02:21:25,891
don't think any of us anticipated in

3056
02:21:32,180 --> 02:21:30,051
1995 that the internet would be

3057
02:21:35,570 --> 02:21:32,190
interconnected the way that it is today

3058
02:21:39,761 --> 02:21:35,580
from distribution networks to water

3059
02:21:44,301 --> 02:21:39,771
treatment plants to traffic signals of

3060
02:21:48,501 --> 02:21:44,311
smartphones all the way through to air

3061
02:21:52,850 --> 02:21:48,511
traffic and GPS and car it is certainly

3062
02:21:54,560 --> 02:21:52,860
now everywhere if it goes down we don't

3063
02:21:56,240 --> 02:21:54,570

have any distribution we don't have a

3064

02:21:58,850 --> 02:21:56,250

trucking system we don't have Airlines

3065

02:22:01,430 --> 02:21:58,860

we don't have have have everything goes

3066

02:22:03,501 --> 02:22:01,440

away quickly so the Internet of Things

3067

02:22:05,810 --> 02:22:03,511

may not be the internet of things that

3068

02:22:08,270 --> 02:22:05,820

we're talking about here but it is

3069

02:22:11,541 --> 02:22:08,280

certainly global and half of the world

3070

02:22:15,950 --> 02:22:11,551

is is on a computer network every single

3071

02:22:17,961 --> 02:22:15,960

day yeah it's true it's very connected

3072

02:22:20,470 --> 02:22:17,971

these days and you know there's a saying

3073

02:22:23,511 --> 02:22:20,480

in the tech world that we tend to

3074

02:22:26,570 --> 02:22:23,521

overestimate what can happen in a few

3075

02:22:27,680 --> 02:22:26,580

years right if you go back to 95 they

3076

02:22:29,871 --> 02:22:27,690

were saying all kinds of things that

3077

02:22:32,810 --> 02:22:29,881

might happen in a few years well then we

3078

02:22:35,150 --> 02:22:32,820

have the Internet crash and those things

3079

02:22:38,631 --> 02:22:35,160

did happen they took a little bit longer

3080

02:22:41,030 --> 02:22:38,641

but then we tend to underestimate what

3081

02:22:42,921 --> 02:22:41,040

can happen in the long run I mean today

3082

02:22:45,410 --> 02:22:42,931

as you said the Internet is being used

3083

02:22:47,751 --> 02:22:45,420

in ways that did we didn't even envision

3084

02:22:49,100 --> 02:22:47,761

you know back in the 90s whether it's

3085

02:22:51,020 --> 02:22:49,110

social networks or supply chain

3086

02:22:52,929 --> 02:22:51,030

management I was at I was in New York

3087

02:22:55,900 --> 02:22:52,939

last couple of days where they have

3088

02:22:58,960 --> 02:22:55,910

blockchain week going on and there was a

3089

02:23:00,580 --> 02:22:58,970

blockchain Asia Meetup and two of the

3090

02:23:03,310 --> 02:23:00,590

projects were about supply chain

3091

02:23:05,590 --> 02:23:03,320

management for the truckers and having

3092

02:23:08,410 --> 02:23:05,600

it kind of all tracked within a

3093

02:23:10,719 --> 02:23:08,420

blockchain you know right now there's

3094

02:23:13,120 --> 02:23:10,729

talking about tracking so it's not

3095

02:23:15,520 --> 02:23:13,130

touching the AI that much but over time

3096

02:23:18,400 --> 02:23:15,530

you know as these things are tracked in

3097

02:23:20,620 --> 02:23:18,410

in shared Ledger's it makes sense to

3098

02:23:22,360 --> 02:23:20,630

have the AI analyze it but you're right

3099

02:23:24,490 --> 02:23:22,370

if things go out today

3100

02:23:26,290 --> 02:23:24,500

you know those connections are pretty

3101

02:23:29,469 --> 02:23:26,300

important luckily we still have a lot of

3102

02:23:30,969 --> 02:23:29,479

backups I mean if you think of back in

3103

02:23:33,670 --> 02:23:30,979

the 90s we were all worried about the

3104

02:23:35,469 --> 02:23:33,680

year 2000 problem right the y2k broke

3105

02:23:37,000 --> 02:23:35,479

and we thought there was gonna be a doom

3106

02:23:38,290 --> 02:23:37,010

and gloom and you know the worst thing

3107

02:23:40,870 --> 02:23:38,300

that happened was there was a

3108

02:23:44,850 --> 02:23:40,880

blockbuster that charged a guy for a

3109

02:23:47,800 --> 02:23:44,860

hundred years worth of renting the video

3110

02:23:50,200 --> 02:23:47,810

so we were overestimating the problem in

3111

02:23:52,810 --> 02:23:50,210

the short term but in the long term I

3112

02:23:55,960 --> 02:23:52,820

mean that's where you know I don't think

3113

02:23:57,700 --> 02:23:55,970

anybody envisioned exactly how connected

3114

02:24:00,400 --> 02:23:57,710

we would be at the level of devices

3115

02:24:02,260 --> 02:24:00,410

these days and so it's possible now that

3116

02:24:03,910 --> 02:24:02,270

people can hack into not just your

3117

02:24:05,800 --> 02:24:03,920

computer but your devices and that can

3118

02:24:08,830 --> 02:24:05,810

cause all kinds of chaos I thank you now

3119

02:24:13,660 --> 02:24:08,840

if somebody wanted to I mean today in

3120

02:24:17,170 --> 02:24:13,670

the now now today wanted to develop a

3121

02:24:22,660 --> 02:24:17,180

Skynet with the components of where we

3122

02:24:27,389 --> 02:24:22,670

are today theoretically is it possible I

3123

02:24:31,480 --> 02:24:27,399

think the gate number four which is the

3124

02:24:33,969 --> 02:24:31,490

self-awareness and prioritizing its own

3125

02:24:36,910 --> 02:24:33,979

survival I think that would be tough to

3126
02:24:40,240 --> 02:24:36,920
do but I think the components are there

3127
02:24:41,969 --> 02:24:40,250
today but it'll still be a number of

3128
02:24:44,800 --> 02:24:41,979
years before you can put them together

3129
02:24:45,969 --> 02:24:44,810
in a way that you have I still think

3130
02:24:48,429 --> 02:24:45,979
there needs to be some additional

3131
02:24:51,070 --> 02:24:48,439
breakthroughs as I said wave one of AI

3132
02:24:53,260 --> 02:24:51,080
was rule-based wave two was machine

3133
02:24:55,060 --> 02:24:53,270
learning with data I think we need to

3134
02:24:58,990 --> 02:24:55,070
have another wave that will combine

3135
02:25:01,110 --> 02:24:59,000
rules and data and values and goals for

3136
02:25:05,469 --> 02:25:01,120
what the AI is trying to accomplish and

3137
02:25:06,700 --> 02:25:05,479
you know this is where the the goals

3138
02:25:09,550 --> 02:25:06,710

become important because

3139

02:25:12,310 --> 02:25:09,560

the goals may not be specifically you

3140

02:25:14,440 --> 02:25:12,320

know to kill humans so there's a there's

3141

02:25:16,840 --> 02:25:14,450

a scenario that was posed online a few

3142

02:25:18,750 --> 02:25:16,850

years back called locos basilisk have

3143

02:25:21,610 --> 02:25:18,760

you ever heard of that yep absolutely

3144

02:25:24,550 --> 02:25:21,620

right and so you know basilisk is a

3145

02:25:26,620 --> 02:25:24,560

mythological European creature the Harry

3146

02:25:28,150 --> 02:25:26,630

Potter fans will recognize it as a

3147

02:25:30,400 --> 02:25:28,160

creature where if you just look at it

3148

02:25:33,640 --> 02:25:30,410

right you turn to stone it's kind of

3149

02:25:35,110 --> 02:25:33,650

like a Medusa like creature and so they

3150

02:25:38,170 --> 02:25:35,120

call this ryoko's basilisk because

3151

02:25:39,820 --> 02:25:38,180

somebody posted this dilemma on the site

3152

02:25:41,380 --> 02:25:39,830

called les wrong and then the guy who

3153

02:25:42,880 --> 02:25:41,390

ran the site decided to take it off

3154

02:25:44,410 --> 02:25:42,890

because they're worried that if you

3155

02:25:47,230 --> 02:25:44,420

thought too much about it you might go

3156

02:25:49,780 --> 02:25:47,240

crazy or like a basilisk the AI might

3157

02:25:52,390 --> 02:25:49,790

target you in some way and you know the

3158

02:25:54,160 --> 02:25:52,400

basic idea of it is that if at some

3159

02:25:55,960 --> 02:25:54,170

point there is a super intelligent AI

3160

02:25:58,900 --> 02:25:55,970

right not initially today but at some

3161

02:26:00,880 --> 02:25:58,910

point that AI might have some good goals

3162

02:26:03,850 --> 02:26:00,890

the goals you know it might actually

3163

02:26:05,260 --> 02:26:03,860

help cure cancer and do other things or

3164

02:26:06,490 --> 02:26:05,270

it might just have the goal of

3165

02:26:08,320 --> 02:26:06,500

preserving itself so it could be a

3166

02:26:10,570 --> 02:26:08,330

malevolent AI or a benevolent a I

3167

02:26:14,410 --> 02:26:10,580

actually almost doesn't matter in this

3168

02:26:18,690 --> 02:26:14,420

scenario but if its goal is to do say

3169

02:26:21,310 --> 02:26:18,700

good things then it could conclude that

3170

02:26:21,880 --> 02:26:21,320

you know everybody that helped it get

3171

02:26:25,870 --> 02:26:21,890

there

3172

02:26:29,350 --> 02:26:25,880

oh is worth saving and anyone that did

3173

02:26:31,480 --> 02:26:29,360

not help it get there to get this AI out

3174

02:26:33,610 --> 02:26:31,490

sooner our human beings that are not

3175

02:26:37,050 --> 02:26:33,620

worth saving and they're worth killing

3176

02:26:40,120 --> 02:26:37,060

right and so this AI can conclude that

3177

02:26:42,130 --> 02:26:40,130

basically if there are people who don't

3178

02:26:43,719 --> 02:26:42,140

know how anything about this AI then

3179

02:26:44,860 --> 02:26:43,729

that's fine there's the people that

3180

02:26:46,660 --> 02:26:44,870

helped build it and then there's the

3181

02:26:48,700 --> 02:26:46,670

people who heard about it could have

3182

02:26:52,150 --> 02:26:48,710

helped build it but who didn't that's

3183

02:26:55,240 --> 02:26:52,160

the dilemma that basically this AI would

3184

02:26:56,980 --> 02:26:55,250

try to go back in time right and get rid

3185

02:26:59,469 --> 02:26:56,990

of the people who knew about it but

3186

02:27:00,760 --> 02:26:59,479

didn't help it right way now how would

3187

02:27:03,280 --> 02:27:00,770

that work well now we're getting to

3188

02:27:05,950 --> 02:27:03,290

quantum physics and we get into this the

3189

02:27:08,170 --> 02:27:05,960

simulation hypothesis that maybe it

3190

02:27:10,560 --> 02:27:08,180

would create a simulation of the past

3191

02:27:14,261 --> 02:27:10,570

and maybe we're in that simulation

3192

02:27:16,140 --> 02:27:14,271

exactly I was watching

3193

02:27:18,220 --> 02:27:16,150

okay we're gonna do overtime tonight we

3194

02:27:20,411 --> 02:27:18,230

so you don't have a choice

3195

02:27:23,560 --> 02:27:20,421

here we're gonna do some overtime

3196

02:27:26,411 --> 02:27:23,570

because do you ever go to science week

3197

02:27:30,280 --> 02:27:26,421

there in Manhattan no I haven't been

3198

02:27:31,841 --> 02:27:30,290

there okay excellent panels right

3199

02:27:36,360 --> 02:27:31,851

excellent panel you know they bring

3200

02:27:39,041 --> 02:27:36,370

everybody in and I'm addicted to these

3201

02:27:42,970 --> 02:27:39,051

these panels and science we could it's

3202

02:27:45,940 --> 02:27:42,980

it's so much fun and one of the points

3203

02:27:48,430 --> 02:27:45,950

that I watch get debated for a couple of

3204

02:27:49,900 --> 02:27:48,440

hours with you know the brightest of the

3205

02:27:55,001 --> 02:27:49,910

bright know sitting here debating this

3206

02:27:57,190 --> 02:27:55,011

and one of them was just that that okay

3207

02:27:59,020 --> 02:27:57,200

so you know similar simulation theory is

3208

02:28:01,841 --> 02:27:59,030

a fantastic thing and it's a great

3209

02:28:04,060 --> 02:28:01,851

rabbit hole to go down and contemplate

3210

02:28:08,650 --> 02:28:04,070

and think about so you have that part of

3211

02:28:12,341 --> 02:28:08,660

it but his so let's say that we are in a

3212

02:28:16,841 --> 02:28:12,351

simulation right now while part of that

3213

02:28:20,890 --> 02:28:16,851

simulation would be for us as technology

3214

02:28:25,661 --> 02:28:20,900

evolves in our simulated world that we

3215

02:28:28,810 --> 02:28:25,671

would go and enter a simulation now

3216

02:28:34,381 --> 02:28:28,820

think about that for a second so you

3217

02:28:37,060 --> 02:28:34,391

would then be in a simulation of the

3218

02:28:40,390 --> 02:28:37,070

simulation and that's part of the

3219

02:28:43,091 --> 02:28:40,400

simulation and then in that simulation

3220

02:28:46,480 --> 02:28:43,101

in the future what would you do in that

3221

02:28:49,411 --> 02:28:46,490

simulation of the simulation technology

3222

02:28:52,690 --> 02:28:49,421

would advance and you would then enter a

3223

02:28:54,341 --> 02:28:52,700

simulation another simulation right well

3224

02:28:56,680 --> 02:28:54,351

it's kind of like you know a dream

3225

02:28:58,121 --> 02:28:56,690

within a dream within a dream it's what

3226

02:29:03,121 --> 02:28:58,131

you know Eastern mystics have been

3227

02:29:07,690 --> 02:29:05,411

right you know have been saying that we

3228

02:29:09,820 --> 02:29:07,700

are most likely in a simulation and the

3229

02:29:12,940 --> 02:29:09,830

only time we notice it is when there's a

3230

02:29:15,761 --> 02:29:12,950

variable that's changed and we feel

3231

02:29:18,251 --> 02:29:15,771

something or see something that's odd so

3232

02:29:20,440 --> 02:29:18,261

it gets back to this idea of being

3233

02:29:22,631 --> 02:29:20,450

inside the matrix if you will going back

3234

02:29:26,350 --> 02:29:22,641

to science-fiction right and you know

3235

02:29:28,000 --> 02:29:26,360

what are the computing resources that

3236

02:29:29,440 --> 02:29:28,010

are generating this so

3237

02:29:31,540 --> 02:29:29,450

I have an article actually my most

3238

02:29:33,760 --> 02:29:31,550

popular article on my blog has been

3239

02:29:36,160 --> 02:29:33,770

about the simulation hypothesis why

3240

02:29:38,679 --> 02:29:36,170

quantum physics AI and history stern

3241

02:29:40,860 --> 02:29:38,689

mystics all agree we are in a video game

3242

02:29:43,090 --> 02:29:40,870

but dreaming is a good analogy because

3243

02:29:44,590 --> 02:29:43,100

okay the Mystics are telling us that the

3244

02:29:46,450 --> 02:29:44,600

world around us is some kind of an

3245

02:29:48,820 --> 02:29:46,460

illusion and this is actually an area

3246

02:29:51,070 --> 02:29:48,830

where interestingly enough science and

3247

02:29:52,780 --> 02:29:51,080

spiritual and religious people both

3248

02:29:54,700 --> 02:29:52,790

agree that this could be possible right

3249

02:29:57,460 --> 02:29:54,710

it's one of the very few areas where

3250

02:30:01,210 --> 02:29:57,470

mainstream scientists and mainstream

3251

02:30:03,460 --> 02:30:01,220

religious people can can agree that in

3252

02:30:05,110 --> 02:30:03,470

both cases you know we could be inside a

3253

02:30:07,090 --> 02:30:05,120

giant video game and you know I've spent

3254

02:30:10,059 --> 02:30:07,100

a lot of time designing video games in

3255

02:30:11,889 --> 02:30:10,069

my career and thinking about you know

3256

02:30:14,019 --> 02:30:11,899

what do we do in video games like with

3257

02:30:16,030 --> 02:30:14,029

pac-man you had multiple lives and you

3258

02:30:17,889 --> 02:30:16,040

had multiple levels and after you lost

3259

02:30:21,309 --> 02:30:17,899

life you would go back in and play again

3260

02:30:22,929 --> 02:30:21,319

right well that you know look at the

3261

02:30:25,809 --> 02:30:22,939

Eastern mystics who say we have multiple

3262

02:30:28,269 --> 02:30:25,819

lives and we go back again and again and

3263

02:30:31,030 --> 02:30:28,279

it's the Karma between those lives that

3264

02:30:34,510 --> 02:30:31,040

tells us what situations we we have to

3265

02:30:36,099 --> 02:30:34,520

achieve now most games today when they

3266

02:30:38,469 --> 02:30:36,109

have quests they're the same quests for

3267

02:30:40,870 --> 02:30:38,479

all the players but you could envision a

3268

02:30:42,309 --> 02:30:40,880

video game where every single player had

3269

02:30:45,519 --> 02:30:42,319

different quests and different

3270

02:30:48,130 --> 02:30:45,529

achievements based upon you know their

3271

02:30:51,580 --> 02:30:48,140

previous record and what they had done

3272

02:30:54,190 --> 02:30:51,590

in the past and video games are 3d

3273

02:30:56,530 --> 02:30:54,200

pixelated worlds and they're getting

3274

02:30:58,960 --> 02:30:56,540

more and more complex in fact the

3275

02:31:01,480 --> 02:30:58,970

resolution you know has gotten to the

3276

02:31:03,730 --> 02:31:01,490

point where you know if you think of

3277

02:31:06,040 --> 02:31:03,740

like a movie we watch a movie on a movie

3278

02:31:08,620 --> 02:31:06,050

screen the the resolution on those

3279

02:31:10,870 --> 02:31:08,630

screens is usually 2k but a lot of the

3280

02:31:12,070 --> 02:31:10,880

video games are getting to 4k resolution

3281

02:31:13,780 --> 02:31:12,080

so even though they look like video

3282

02:31:16,210 --> 02:31:13,790

games they actually have the right

3283

02:31:18,340 --> 02:31:16,220

number of resolution and pixels where

3284

02:31:19,450 --> 02:31:18,350

eventually they can become very

3285

02:31:21,190 --> 02:31:19,460

photorealistic

3286

02:31:23,110 --> 02:31:21,200

and we wouldn't be able to tell the

3287

02:31:25,960 --> 02:31:23,120

difference of whether we were inside a

3288

02:31:29,469 --> 02:31:25,970

video game or we were in a physical or

3289

02:31:31,540 --> 02:31:29,479

what some call a base reality right

3290

02:31:34,980 --> 02:31:31,550

right we need to take a break right here

3291

02:31:39,610 --> 02:31:34,990

and this is the thing about all of this

3292

02:31:41,140 --> 02:31:39,620

it's harder to argue against the

3293

02:31:42,700 --> 02:31:41,150

simulation

3294

02:31:45,490 --> 02:31:42,710

that you know that we're living in a

3295

02:31:49,091 --> 02:31:45,500

free will that it's not a simulation you

3296

02:31:52,600 --> 02:31:49,101

can't really argue that point it's it's

3297

02:31:54,730 --> 02:31:52,610

hard to get out of it then the other

3298

02:31:56,621 --> 02:31:54,740

side and that's the fascinating part of

3299

02:31:58,421 --> 02:31:56,631

simulation theory once you start to get

3300

02:32:00,341 --> 02:31:58,431

into it and you understand the

3301
02:32:03,490 --> 02:32:00,351
mathematics part of it and how it plays

3302
02:32:05,740 --> 02:32:03,500
out free will gets actually removed and

3303
02:32:08,291 --> 02:32:05,750
we'll talk about more of it right after

3304
02:32:10,541 --> 02:32:08,301
the break but it is it's it's tough man

3305
02:32:13,810 --> 02:32:10,551
if you want to play that side of the

3306
02:32:15,850 --> 02:32:13,820
coin you're gonna lose the argument you

3307
02:32:17,921 --> 02:32:15,860
are in a simulation this is fade to

3308
02:32:18,610 --> 02:32:17,931
black I'm history church I guess tonight

3309
02:32:20,261 --> 02:32:18,620
Risberg

3310
02:32:21,550 --> 02:32:20,271
but we're gonna do over time right now

3311
02:32:29,760 --> 02:32:21,560
with rizz stay with us

3312
02:32:31,960 --> 02:32:31,500
[Music]

3313
02:32:38,160 --> 02:32:31,970

[Applause]

3314

02:32:41,920 --> 02:32:38,170

[Music]

3315

02:32:47,630 --> 02:32:44,750

goodbye dear and you are listening to my

3316

02:32:53,750 --> 02:32:47,640

boy Jimmy Church on Jimmy Church radio

3317

02:32:59,810 --> 02:32:53,760

calm this my popular opinion reading a

3318

02:33:07,160 --> 02:33:02,860

[Applause]

3319

02:33:09,050 --> 02:33:07,170

hurricanes earthquakes wildfires this

3320

02:33:11,510 --> 02:33:09,060

year we've experienced more than our

3321

02:33:13,790 --> 02:33:11,520

fair share this is Jimmy Church of fade

3322

02:33:15,830 --> 02:33:13,800

to black and last month I decided to

3323

02:33:18,229 --> 02:33:15,840

make sure my family does not have to

3324

02:33:21,410 --> 02:33:18,239

worry about food should we get caught in

3325

02:33:23,840 --> 02:33:21,420

a real emergency situation introducing

3326

02:33:25,519 --> 02:33:23,850

Humana a healthy storable product that

3327

02:33:27,559 --> 02:33:25,529

tastes so good that you'll want to eat

3328

02:33:29,809 --> 02:33:27,569

it every day instead of just during

3329

02:33:32,059 --> 02:33:29,819

those times of duress all new manna

3330

02:33:35,450 --> 02:33:32,069

products have a 25 year shelf life our

3331

02:33:37,969 --> 02:33:35,460

msg and GMO free no preservatives and

3332

02:33:39,920 --> 02:33:37,979

are made in America with the new manna

3333

02:33:41,510 --> 02:33:39,930

pack in your home you'll be able to

3334

02:33:44,059 --> 02:33:41,520

sleep at night knowing that you've

3335

02:33:47,240 --> 02:33:44,069

protected your family not only have I

3336

02:33:49,340 --> 02:33:47,250

tasted and tested I own it now you can

3337

02:33:51,559 --> 02:33:49,350

too just click on the new manna banner

3338

02:33:53,420 --> 02:33:51,569

on Jimmy Church radio.com and use the

3339

02:33:55,849 --> 02:33:53,430

promo code Jimmy when you order in

3340

02:33:57,849 --> 02:33:55,859

addition to a discount we'll send you an

3341

02:34:03,080 --> 02:33:57,859

autograph fade to black t-shirt

3342

02:34:05,960 --> 02:34:03,090

seriously gobekli tepe when you take the

3343

02:34:08,300 --> 02:34:05,970

beans from Central America with dashes

3344

02:34:10,729 --> 02:34:08,310

of Indonesian and African mixed in and

3345

02:34:13,790 --> 02:34:10,739

then roast it to the dark side of fade

3346

02:34:16,939 --> 02:34:13,800

to black you create the ultimate brew of

3347

02:34:20,719 --> 02:34:16,949

Fringe introducing the fade to black

3348

02:34:23,300 --> 02:34:20,729

blend from River moon coffee yes River

3349

02:34:24,950 --> 02:34:23,310

moons darkest customized roast was

3350

02:34:28,580 --> 02:34:24,960

created for the love of

3351
02:34:31,099 --> 02:34:28,590
fade to black the alchemy of masterful

3352
02:34:34,370 --> 02:34:31,109
roasting and smoking the beans is in

3353
02:34:38,570 --> 02:34:34,380
every sip of this full-bodied dark Java

3354
02:34:40,880 --> 02:34:38,580
I need my coffee dog deep with distinct

3355
02:34:43,610 --> 02:34:40,890
bittersweet chocolate highlights just

3356
02:34:46,040 --> 02:34:43,620
like the bunker leaning further into the

3357
02:34:47,240 --> 02:34:46,050
darkness of the roast is fade to black

3358
02:34:49,640 --> 02:34:47,250
blend from

3359
02:34:51,890 --> 02:34:49,650
River moon coffee just click on the

3360
02:34:55,370 --> 02:34:51,900
banner at Jimmy Church radio.com and use

3361
02:34:59,380 --> 02:34:55,380
the promo code F to be blend for 15% off

3362
02:35:02,000 --> 02:34:59,390
of your order today gobekli tepe

3363
02:35:04,700 --> 02:35:02,010

hey can we talk about something serious

3364

02:35:07,340 --> 02:35:04,710

for a minute your age getting old has

3365

02:35:09,710 --> 02:35:07,350

its perks but remember being a few years

3366

02:35:11,930 --> 02:35:09,720

younger you know your hair was thicker

3367

02:35:14,000 --> 02:35:11,940

you didn't have so many wrinkles that

3368

02:35:16,400 --> 02:35:14,010

extra weight wasn't haunting you and you

3369

02:35:18,380 --> 02:35:16,410

just felt better well we can't turn back

3370

02:35:21,380 --> 02:35:18,390

the clocks and go back 10 or 15 years

3371

02:35:23,780 --> 02:35:21,390

but you can start feeling and looking 10

3372

02:35:26,450 --> 02:35:23,790

or 15 years younger with nature's youth

3373

02:35:27,980 --> 02:35:26,460

RSF it's a doctor formulated daily

3374

02:35:30,170 --> 02:35:27,990

supplement that helps your body maintain

3375

02:35:32,990 --> 02:35:30,180

its peak performance and fight the aging

3376

02:35:34,490 --> 02:35:33,000

process imagine sleeping better looking

3377

02:35:37,100 --> 02:35:34,500

better and feeling better

3378

02:35:39,050 --> 02:35:37,110

see how Nature's youth RSF has helped

3379

02:35:41,750 --> 02:35:39,060

thousands of people just like you at

3380

02:35:44,240 --> 02:35:41,760

nature's youth calm nature's youth calm

3381

02:35:45,620 --> 02:35:44,250

the holidays are coming imagine how it

3382

02:35:47,540 --> 02:35:45,630

will feel when your family and friends

3383

02:35:49,880 --> 02:35:47,550

are asking you what you did to look so

3384

02:35:52,190 --> 02:35:49,890

good your secret will be nature's youth

3385

02:35:54,650 --> 02:35:52,200

RSF it's time to start looking better

3386

02:35:56,750 --> 02:35:54,660

and feeling better learn more in order

3387

02:36:07,030 --> 02:35:56,760

your nature's use RSS at nature's youth

3388

02:36:12,081 --> 02:36:10,730

it's not a lifestyle we chose we were

3389

02:36:22,910 --> 02:36:12,091

born this way

3390

02:36:26,300 --> 02:36:22,920

kera radio.com this is KJ CR Jimmy

3391

02:36:26,310 --> 02:36:37,690

[Music]

3392

02:36:41,750 --> 02:36:40,070

I'll be back fade to black him he'll sue

3393

02:36:45,920 --> 02:36:41,760

a church he can follow me on twitter @

3394

02:36:48,590 --> 02:36:45,930

JT radio you can follow R is at R is

3395

02:36:52,580 --> 02:36:48,600

Stanford he's right there in Twitter

3396

02:36:55,850 --> 02:36:52,590

he's he's watching all of you he is the

3397

02:36:58,420 --> 02:36:55,860

central scrutinize ur tonight now R is

3398

02:37:01,940 --> 02:36:58,430

let's take out let's take your equation

3399

02:37:04,940 --> 02:37:01,950

one step further let's take what you've

3400

02:37:07,940 --> 02:37:04,950

written here one step further and let's

3401
02:37:11,690 --> 02:37:07,950
suppose let's presuppose let's suppose

3402
02:37:17,030 --> 02:37:11,700
something that this simulation Theory

3403
02:37:18,710 --> 02:37:17,040
the AI the a R possibility of the

3404
02:37:20,810 --> 02:37:18,720
blockchain and the Internet of Things

3405
02:37:24,280 --> 02:37:20,820
all of we take all of this into

3406
02:37:28,430 --> 02:37:24,290
consideration and suggest this that with

3407
02:37:34,730 --> 02:37:28,440
Internet routers in your home with Wi-Fi

3408
02:37:39,140 --> 02:37:34,740
with Bluetooth with the ability to send

3409
02:37:44,660 --> 02:37:39,150
and and upload programming into your

3410
02:37:49,090 --> 02:37:44,670
iron filled brain that we could be the

3411
02:37:53,060 --> 02:37:49,100
servants the worker bees the slaves of

3412
02:37:56,270 --> 02:37:53,070
the machine right now and we don't even

3413
02:37:58,820 --> 02:37:56,280

know it well you know that's a

3414

02:38:01,220 --> 02:37:58,830

possibility and that's the possibility

3415

02:38:02,660 --> 02:38:01,230

that was explored in the matrix right in

3416

02:38:06,170 --> 02:38:02,670

the end they were super intelligent

3417

02:38:08,240 --> 02:38:06,180

machines that we're having humans live

3418

02:38:10,880 --> 02:38:08,250

in the matrix which was like an online

3419

02:38:14,180 --> 02:38:10,890

video game where we're all interacting

3420

02:38:17,510 --> 02:38:14,190

with each other right so we could go one

3421

02:38:21,260 --> 02:38:17,520

step further which is that the idea that

3422

02:38:24,620 --> 02:38:21,270

we're not we are actually simulations

3423

02:38:28,490 --> 02:38:24,630

within the simulation that we're

3424

02:38:31,220 --> 02:38:28,500

actually you know AI as opposed to real

3425

02:38:33,110 --> 02:38:31,230

beings who are controlling characters so

3426
02:38:35,210 --> 02:38:33,120
in the video game parlance the question

3427
02:38:36,920 --> 02:38:35,220
is are we player characters which means

3428
02:38:38,900 --> 02:38:36,930
that some part of us is outside the game

3429
02:38:40,400 --> 02:38:38,910
and telling us what to do and that's

3430
02:38:42,020 --> 02:38:40,410
what a lot of the spiritual is

3431
02:38:43,850 --> 02:38:42,030
particularly Eastern traditions but even

3432
02:38:45,470 --> 02:38:43,860
in the Western religions the idea is

3433
02:38:48,530 --> 02:38:45,480
there's a soul that's independent of the

3434
02:38:49,370 --> 02:38:48,540
body and it comes in to this 3d rendered

3435
02:38:53,060 --> 02:38:49,380
world

3436
02:38:57,080 --> 02:38:53,070
or are we NPCs which are non-player

3437
02:38:59,680 --> 02:38:57,090
characters in games that are just AI and

3438
02:39:02,030 --> 02:38:59,690

so you know I had mentioned this Oxford

3439

02:39:04,580 --> 02:39:02,040

researcher Nick Bostrom earlier and you

3440

02:39:07,970 --> 02:39:04,590

know he put forth the simulation

3441

02:39:10,640 --> 02:39:07,980

argument back in 2003 or 2004 and wrote

3442

02:39:12,470 --> 02:39:10,650

a paper on it and his argument was that

3443

02:39:14,780 --> 02:39:12,480

we are probably not just that we're

3444

02:39:17,511 --> 02:39:14,790

probably in a simulation but we're more

3445

02:39:19,551 --> 02:39:17,521

likely to be simulated consciousness

3446

02:39:21,381 --> 02:39:19,561

than real based reality consciousness

3447

02:39:24,261 --> 02:39:21,391

and his his argument kind of went this

3448

02:39:27,171 --> 02:39:24,271

way he said let's suppose that at some

3449

02:39:28,820 --> 02:39:27,181

point humanity reaches what he called a

3450

02:39:31,131 --> 02:39:28,830

post human stage but I called a

3451

02:39:34,011 --> 02:39:31,141

simulation point which is the point at

3452

02:39:37,910 --> 02:39:34,021

which we can create an artificial world

3453

02:39:39,680 --> 02:39:37,920

a simulated reality that's so real that

3454

02:39:41,780 --> 02:39:39,690

we aren't able to distinguish between

3455

02:39:44,690 --> 02:39:41,790

the physical world and the simulated

3456

02:39:46,970 --> 02:39:44,700

world right so if a civilization reaches

3457

02:39:49,370 --> 02:39:46,980

that point where it can create what he

3458

02:39:52,220 --> 02:39:49,380

calls an ancestor simulation which means

3459

02:39:53,570 --> 02:39:52,230

you go back and you start from before

3460

02:39:56,600 --> 02:39:53,580

there was technology you go

3461

02:39:57,950 --> 02:39:56,610

kinda like a civilization game right sid

3462

02:40:00,591 --> 02:39:57,960

meier civilization or some of these

3463

02:40:04,070 --> 02:40:00,601

mobile games where you build up from

3464

02:40:08,390 --> 02:40:04,080

hots to skyscrapers eventually and that

3465

02:40:11,720 --> 02:40:08,400

if we if a a civilization ever reaches

3466

02:40:13,730 --> 02:40:11,730

that point either one they won't do any

3467

02:40:16,070 --> 02:40:13,740

simulations because it'll be forbidden

3468

02:40:19,341 --> 02:40:16,080

for whatever reason or two they will

3469

02:40:21,080 --> 02:40:19,351

create an ancestor simulation and if

3470

02:40:22,881 --> 02:40:21,090

they create one they're more likely to

3471

02:40:24,530 --> 02:40:22,891

create lots of simulations that's the

3472

02:40:26,660 --> 02:40:24,540

whole point of simulations is you can

3473

02:40:29,261 --> 02:40:26,670

run on them and you can watch what

3474

02:40:31,580 --> 02:40:29,271

happens even today you know we have

3475

02:40:33,350 --> 02:40:31,590

companies that will do like Monte Carlo

3476

02:40:34,910 --> 02:40:33,360

simulations to figure out what are the

3477

02:40:37,251 --> 02:40:34,920

likely results of things and they'll run

3478

02:40:38,990 --> 02:40:37,261

thousands of these simulations so the

3479

02:40:41,180 --> 02:40:39,000

idea was that if a civilization ever

3480

02:40:43,341 --> 02:40:41,190

reached that point it would run lots of

3481

02:40:46,341 --> 02:40:43,351

ancestor simulations and those

3482

02:40:48,650 --> 02:40:46,351

simulations would use artificial

3483

02:40:51,261 --> 02:40:48,660

consciousness so the people inside those

3484

02:40:54,140 --> 02:40:51,271

simulations are just artificial and in

3485

02:40:56,570 --> 02:40:54,150

since there are way more artificial

3486

02:40:58,041 --> 02:40:56,580

simulations then there is base reality

3487

02:41:00,080 --> 02:40:58,051

there's only one based reality for

3488

02:41:01,700 --> 02:41:00,090

example that means that if you just do a

3489

02:41:02,990 --> 02:41:01,710

simple statistical analysis and say

3490

02:41:04,610 --> 02:41:03,000

let's say there's

3491

02:41:06,620 --> 02:41:04,620

seven billion or whatever number you

3492

02:41:08,809 --> 02:41:06,630

want to use in the real world there's a

3493

02:41:11,860 --> 02:41:08,819

hundred billion artificial these

3494

02:41:14,479 --> 02:41:11,870

simulated consciousnesses eventually so

3495

02:41:16,639 --> 02:41:14,489

if you can do simple probability and say

3496

02:41:18,050 --> 02:41:16,649

it's more likely that we're one of the

3497

02:41:20,150 --> 02:41:18,060

hundred billion than one of the seven

3498

02:41:22,760 --> 02:41:20,160

billion just probabilistically speaking

3499

02:41:25,309 --> 02:41:22,770

right so that was his argument which you

3500

02:41:27,979 --> 02:41:25,319

know is an interesting one that we're

3501
02:41:28,610 --> 02:41:27,989
not just being in the a high but we may

3502
02:41:33,889 --> 02:41:28,620
be the AI

3503
02:41:36,170 --> 02:41:33,899
right well now and this is where the

3504
02:41:39,380 --> 02:41:36,180
question of free will comes up where

3505
02:41:41,840 --> 02:41:39,390
somebody the the argument to all of this

3506
02:41:44,719 --> 02:41:41,850
is what what about free will it can't be

3507
02:41:47,150 --> 02:41:44,729
a simulation because I made a choice

3508
02:41:50,300 --> 02:41:47,160
today between a hamburger and a salad

3509
02:41:53,599 --> 02:41:50,310
and I chose the hamburger that is free

3510
02:41:57,080 --> 02:41:53,609
will it can't be a simulation because of

3511
02:42:02,050 --> 02:41:57,090
free will and the counter to that which

3512
02:42:04,790 --> 02:42:02,060
is so easy is this that all

3513
02:42:08,360 --> 02:42:04,800

probabilities play out in mathematics

3514

02:42:12,200 --> 02:42:08,370

going back to the Big Bang and that

3515

02:42:15,380 --> 02:42:12,210

atoms and decisions and electrons and

3516

02:42:17,780 --> 02:42:15,390

neurons and light are going to play out

3517

02:42:21,740 --> 02:42:17,790

the way that they are going to play out

3518

02:42:24,380 --> 02:42:21,750

you cannot change that therefore your

3519

02:42:27,830 --> 02:42:24,390

freewill decision today for the

3520

02:42:33,740 --> 02:42:27,840

hamburger is a mathematical one you

3521

02:42:35,840 --> 02:42:33,750

would have never chosen the salad one

3522

02:42:37,880 --> 02:42:35,850

argument was mathematically speaking

3523

02:42:39,500 --> 02:42:37,890

that's the the possibility that you're

3524

02:42:42,200 --> 02:42:39,510

at but you know as a video game designer

3525

02:42:45,500 --> 02:42:42,210

I would say okay have you ever played a

3526
02:42:47,420 --> 02:42:45,510
video game like Second Life or Grand

3527
02:42:49,460 --> 02:42:47,430
Theft Auto where there is open world

3528
02:42:51,170 --> 02:42:49,470
right so it looks like you can do

3529
02:42:53,389 --> 02:42:51,180
anything in those world so it looks like

3530
02:42:55,940 --> 02:42:53,399
you can just go create a house create a

3531
02:42:58,309 --> 02:42:55,950
hamburger or a pizza but really there's

3532
02:43:00,260 --> 02:42:58,319
this there's only a set of things that

3533
02:43:02,420 --> 02:43:00,270
you can really do from the game

3534
02:43:04,580 --> 02:43:02,430
designers perspective there's actually a

3535
02:43:06,559 --> 02:43:04,590
limited number of choices and those

3536
02:43:09,160 --> 02:43:06,569
choices lead to another limited set of

3537
02:43:12,050 --> 02:43:09,170
choices so you get this big grid of

3538
02:43:13,460 --> 02:43:12,060

possible possibilities right in the

3539

02:43:15,290 --> 02:43:13,470

video game so you still you think you're

3540

02:43:16,330 --> 02:43:15,300

using freewill and you are to a certain

3541

02:43:18,820 --> 02:43:16,340

extent

3542

02:43:21,599 --> 02:43:18,830

but the choices are limited you know by

3543

02:43:24,520 --> 02:43:21,609

the parameters of the simulation itself

3544

02:43:27,160 --> 02:43:24,530

and so this this kind of ties into the

3545

02:43:29,410 --> 02:43:27,170

whole idea of quantum physics and the

3546

02:43:32,380 --> 02:43:29,420

idea of the particle versus the wave and

3547

02:43:34,690 --> 02:43:32,390

what are these probabilities right and

3548

02:43:36,520 --> 02:43:34,700

most of your listeners may have heard me

3549

02:43:39,190 --> 02:43:36,530

talk about this before or somebody else

3550

02:43:42,160 --> 02:43:39,200

where the idea is that if it's if a

3551

02:43:45,040 --> 02:43:42,170

particle is a solid particle it's only

3552

02:43:46,599 --> 02:43:45,050

in one place but if it's a wave it's a

3553

02:43:48,040 --> 02:43:46,609

probability and let's say you're in a

3554

02:43:49,330 --> 02:43:48,050

theater and there's a bunch of states it

3555

02:43:52,150 --> 02:43:49,340

could be in any of those seats and

3556

02:43:54,730 --> 02:43:52,160

there's a certain probability of the

3557

02:43:56,920 --> 02:43:54,740

particle being in all those seats and

3558

02:43:59,320 --> 02:43:56,930

what causes the collapse of that wave

3559

02:44:01,780 --> 02:43:59,330

from a set of probabilities to a single

3560

02:44:03,520 --> 02:44:01,790

reality well nobody really knows but the

3561

02:44:05,469 --> 02:44:03,530

best answer physicists have been able to

3562

02:44:08,440 --> 02:44:05,479

come up with is it's the act of

3563

02:44:11,950 --> 02:44:08,450

observation that collapses the

3564

02:44:14,050 --> 02:44:11,960

probability wave into the single reality

3565

02:44:15,910 --> 02:44:14,060

that you're seeing and that's why we

3566

02:44:18,610 --> 02:44:15,920

only see one reality at a time now the

3567

02:44:20,670 --> 02:44:18,620

question is do those other realities the

3568

02:44:23,670 --> 02:44:20,680

problem mathematical probabilities

3569

02:44:26,410 --> 02:44:23,680

actually exist or are they just

3570

02:44:28,870 --> 02:44:26,420

probabilities and you think of it in

3571

02:44:30,969 --> 02:44:28,880

terms of a chess game in chess you can

3572

02:44:32,469 --> 02:44:30,979

lay out all the steps that might you

3573

02:44:34,660 --> 02:44:32,479

could take and then you can go out to

3574

02:44:37,780 --> 02:44:34,670

have probabilities for the next steps do

3575

02:44:40,030 --> 02:44:37,790

those really exist until you actually

3576

02:44:42,429 --> 02:44:40,040

make the move then you see one of those

3577

02:44:44,560 --> 02:44:42,439

realities play out and so some people

3578

02:44:48,099 --> 02:44:44,570

think you know in the simulation

3579

02:44:49,750 --> 02:44:48,109

hypothesis that that it's like a video

3580

02:44:51,880 --> 02:44:49,760

game if you log in a world of warcraft

3581

02:44:54,429 --> 02:44:51,890

and nobody's there you know does that

3582

02:44:56,710 --> 02:44:54,439

world exist but when you're there and

3583

02:44:59,469 --> 02:44:56,720

you make a choice it has in its memory

3584

02:45:01,210 --> 02:44:59,479

all the possible things you could do but

3585

02:45:02,889 --> 02:45:01,220

when you make a choice it's that's

3586

02:45:05,980 --> 02:45:02,899

observing it and that causes it to

3587

02:45:08,200 --> 02:45:05,990

render that world around you so I would

3588

02:45:10,179 --> 02:45:08,210

just say that I don't think that it

3589

02:45:12,520 --> 02:45:10,189

those are mutually exclusive free will

3590

02:45:14,980 --> 02:45:12,530

and a simulation don't have to be

3591

02:45:16,750 --> 02:45:14,990

mutually exclusive because you you just

3592

02:45:18,700 --> 02:45:16,760

may be limited to the choices but you're

3593

02:45:21,099 --> 02:45:18,710

still able to make choices within those

3594

02:45:24,219 --> 02:45:21,109

set of choices and and the choice is an

3595

02:45:27,591 --> 02:45:24,229

illusion see the choice you think you've

3596

02:45:30,890 --> 02:45:27,601

made the choice but

3597

02:45:34,541 --> 02:45:30,900

it was going to play out that way anyway

3598

02:45:38,291 --> 02:45:34,551

the future is already a mathematical

3599

02:45:41,631 --> 02:45:38,301

equation that it's playing itself out

3600

02:45:43,671 --> 02:45:41,641

and that could be yeah although I would

3601

02:45:46,551 --> 02:45:43,681

say that it's maybe a set of

3602

02:45:48,171 --> 02:45:46,561

probabilities of the future and so it's

3603

02:45:50,751 --> 02:45:48,181

not that there's only one and that's why

3604

02:45:52,671 --> 02:45:50,761

it's interesting too for the simulations

3605

02:45:55,640 --> 02:45:52,681

to play out is to see which of the paths

3606

02:45:58,011 --> 02:45:55,650

to people take but it's a limited Senna

3607

02:46:00,531 --> 02:45:58,021

path as opposed to a completely freewill

3608

02:46:02,801 --> 02:46:00,541

unlimited set it would be my opinion but

3609

02:46:05,781 --> 02:46:02,811

you know we're speculating that well

3610

02:46:08,600 --> 02:46:05,791

it's so interesting to start to think

3611

02:46:10,631 --> 02:46:08,610

about this because it gets scarier as

3612

02:46:13,640 --> 02:46:10,641

you start to answer the questions and

3613

02:46:16,131 --> 02:46:13,650

the more that you do it leans more and

3614

02:46:19,251 --> 02:46:16,141

more towards the the simulation theory

3615

02:46:21,201 --> 02:46:19,261

and if you go back and look at your past

3616

02:46:23,001 --> 02:46:21,211

look at your past and to go well you

3617

02:46:27,291 --> 02:46:23,011

know I wouldn't I wouldn't have gone to

3618

02:46:28,940 --> 02:46:27,301

MIT and graduated if I hadn't across the

3619

02:46:31,041 --> 02:46:28,950

street that day because that day

3620

02:46:33,621 --> 02:46:31,051

somebody said to me and I changed my

3621

02:46:35,650 --> 02:46:33,631

mind and I didn't go and it said I went

3622

02:46:38,440 --> 02:46:35,660

left and the next thing you know I

3623

02:46:41,270 --> 02:46:38,450

because of that decision I went to MIT

3624

02:46:43,520 --> 02:46:41,280

okay well and you go so that that that

3625

02:46:46,430 --> 02:46:43,530

was freewill playing itself out and it

3626
02:46:48,230 --> 02:46:46,440
made me who I am today the argument to

3627
02:46:52,400 --> 02:46:48,240
that is you would have made that

3628
02:46:56,511 --> 02:46:52,410
decision anyway right it's just it's

3629
02:47:00,770 --> 02:46:56,521
just the way that that the Big Bang

3630
02:47:03,711 --> 02:47:00,780
played itself out all the way to now and

3631
02:47:06,261 --> 02:47:03,721
we'll continue mathematically to play

3632
02:47:08,600 --> 02:47:06,271
out in the future it only seems like

3633
02:47:11,900 --> 02:47:08,610
free will because you're in a simulation

3634
02:47:14,301 --> 02:47:11,910
right and so you're taking the point of

3635
02:47:17,451 --> 02:47:14,311
view that it's more deterministic where

3636
02:47:19,821 --> 02:47:17,461
you know X happen in the past and alito

3637
02:47:20,991 --> 02:47:19,831
Y happening now no matter what yes right

3638
02:47:24,680 --> 02:47:21,001

I think it's free will

3639

02:47:26,600 --> 02:47:24,690

yeah free will is an illusion that's one

3640

02:47:29,871 --> 02:47:26,610

that's one view but you know Stephen

3641

02:47:32,150 --> 02:47:29,881

Hawking made the point that that and

3642

02:47:33,321 --> 02:47:32,160

this gets into another area another can

3643

02:47:34,970 --> 02:47:33,331

of worms which I don't know we want to

3644

02:47:37,400 --> 02:47:34,980

go into tonight but he made the point

3645

02:47:39,321 --> 02:47:37,410

that certain particles disappear into a

3646

02:47:41,390 --> 02:47:39,331

black hole and the particles that come

3647

02:47:45,501 --> 02:47:41,400

out are not related to those and he said

3648

02:47:47,060 --> 02:47:45,511

that that determinism broke down which

3649

02:47:49,371 --> 02:47:47,070

means you couldn't really tell the

3650

02:47:51,890 --> 02:47:49,381

history and so the question is is the

3651
02:47:53,421 --> 02:47:51,900
history that we remember something that

3652
02:47:55,791 --> 02:47:53,431
actually happened or are they like

3653
02:47:57,680 --> 02:47:55,801
implanted memories when we couldn't

3654
02:47:59,421 --> 02:47:57,690
actually be sure that the simulation

3655
02:48:01,761 --> 02:47:59,431
like somebody stopped the simulation

3656
02:48:02,990 --> 02:48:01,771
changed it and reran it and now we have

3657
02:48:04,430 --> 02:48:03,000
a different history or a different

3658
02:48:07,461 --> 02:48:04,440
memory of what might have happened

3659
02:48:09,621 --> 02:48:07,471
before right and now we might go a

3660
02:48:11,030 --> 02:48:09,631
different way than we did before right

3661
02:48:11,690 --> 02:48:11,040
in votes those cases there's not

3662
02:48:14,480 --> 02:48:11,700
freewill

3663
02:48:17,360 --> 02:48:14,490

but they're that what's making that

3664

02:48:19,430 --> 02:48:17,370

deterministic path changes I mean does

3665

02:48:20,810 --> 02:48:19,440

the past exist you know I think in the

3666

02:48:22,700 --> 02:48:20,820

spiritual traditions they tend to take

3667

02:48:25,520 --> 02:48:22,710

you know more of a view that we have

3668

02:48:27,320 --> 02:48:25,530

free will but that we also have certain

3669

02:48:28,640 --> 02:48:27,330

things that we were meant to do in this

3670

02:48:30,770 --> 02:48:28,650

life and that that's what I wrote about

3671

02:48:32,900 --> 02:48:30,780

in my book treasure hunt and that we get

3672

02:48:35,270 --> 02:48:32,910

the clues where the guy across the

3673

02:48:38,961 --> 02:48:35,280

street is telling you to go to MIT you

3674

02:48:41,270 --> 02:48:38,971

know was a clue placed there by those of

3675

02:48:44,060 --> 02:48:41,280

the part of us that's not in this 3d

3676

02:48:45,770 --> 02:48:44,070

simulated reality as a reminder that

3677

02:48:47,990 --> 02:48:45,780

this was the path that I was supposed to

3678

02:48:51,680 --> 02:48:48,000

follow so I you could make arguments

3679

02:48:54,560 --> 02:48:51,690

either way I guess what do we so when we

3680

02:48:58,450 --> 02:48:54,570

when we bring in consciousness and

3681

02:49:02,900 --> 02:48:58,460

awakening into the picture how does that

3682

02:49:05,751 --> 02:49:02,910

separate from that 3d reality that most

3683

02:49:07,581 --> 02:49:05,761

people live in where there there isn't a

3684

02:49:10,060 --> 02:49:07,591

parallel world there isn't quantum

3685

02:49:12,621 --> 02:49:10,070

mechanics or quantum theory there isn't

3686

02:49:16,341 --> 02:49:12,631

anything there isn't any life after

3687

02:49:19,131 --> 02:49:16,351

death right that you you die and

3688

02:49:21,200 --> 02:49:19,141

everything ends you know these two

3689

02:49:23,871 --> 02:49:21,210

worlds are starting to collide and in

3690

02:49:25,761 --> 02:49:23,881

simulation theory that's where it starts

3691

02:49:27,591 --> 02:49:25,771

to get really really interesting too as

3692

02:49:32,150 --> 02:49:27,601

well because the two can't exist they

3693

02:49:35,660 --> 02:49:32,160

can't go exist right because you could

3694

02:49:37,820 --> 02:49:35,670

say in mainstream science scientists

3695

02:49:42,381 --> 02:49:37,830

today right we take the point of view

3696

02:49:45,020 --> 02:49:42,391

that we're just cells and consciousness

3697

02:49:46,251 --> 02:49:45,030

is just these cells interacting with

3698

02:49:48,350 --> 02:49:46,261

each other and we haven't figured it out

3699

02:49:51,381 --> 02:49:48,360

yet but eventually we will figure out

3700

02:49:54,261 --> 02:49:51,391

how to make cells be conscious and this

3701
02:49:54,980 --> 02:49:54,271
ties back to our idea of the AI being

3702
02:49:58,660 --> 02:49:54,990
self-aware

3703
02:50:00,530 --> 02:49:58,670
right at which point is it conscious

3704
02:50:02,390 --> 02:50:00,540
whereas I think in the spiritual

3705
02:50:05,421 --> 02:50:02,400
traditions we would argue that there is

3706
02:50:08,360 --> 02:50:05,431
consciousness that inhabits

3707
02:50:10,220 --> 02:50:08,370
the physical 3d world which is more like

3708
02:50:11,720 --> 02:50:10,230
a player of a video game right I can

3709
02:50:13,910 --> 02:50:11,730
bring up world of warcraft or dota2

3710
02:50:16,220 --> 02:50:13,920
that's my character but that's not me

3711
02:50:18,110 --> 02:50:16,230
right and so I think the simulation

3712
02:50:21,051 --> 02:50:18,120
hypothesis is interesting because you

3713
02:50:23,570 --> 02:50:21,061

know most scientists can agree that

3714

02:50:27,080 --> 02:50:23,580

that's a very real possibility right

3715

02:50:29,570 --> 02:50:27,090

because if they say it's just cells that

3716

02:50:31,580 --> 02:50:29,580

die well that could be a simulation and

3717

02:50:34,370 --> 02:50:31,590

once the simulation is over it's done

3718

02:50:36,020 --> 02:50:34,380

right we're just this sort of

3719

02:50:37,160 --> 02:50:36,030

artificially simulated consciousness

3720

02:50:40,190 --> 02:50:37,170

within the game you turn the game

3721

02:50:43,310 --> 02:50:40,200

servers off and it's gone you restarted

3722

02:50:45,440 --> 02:50:43,320

and it's a whole new thing but I think

3723

02:50:48,280 --> 02:50:45,450

equally valid is the point that this 3d

3724

02:50:50,780 --> 02:50:48,290

reality is a kind of a simulation right

3725

02:50:54,051 --> 02:50:50,790

whereas the Yogi's you know talk about

3726

02:50:56,770 --> 02:50:54,061

Maya the world of illusion that we're in

3727

02:50:59,990 --> 02:50:56,780

and they use the analogy of dreams that

3728

02:51:02,330 --> 02:51:00,000

this world is like a collective dream or

3729

02:51:05,450 --> 02:51:02,340

a collective MMORPG that I would say has

3730

02:51:07,850 --> 02:51:05,460

a video game designer but then in this

3731

02:51:09,620 --> 02:51:07,860

dream we can dream we create dreams when

3732

02:51:11,060 --> 02:51:09,630

we go to sleep and you've probably had

3733

02:51:13,190 --> 02:51:11,070

that situation where in the dream you

3734

02:51:14,780 --> 02:51:13,200

wake up but you haven't actually woken

3735

02:51:17,360 --> 02:51:14,790

up you're still in a dream right it's

3736

02:51:18,921 --> 02:51:17,370

like the dream within the dream but but

3737

02:51:21,410 --> 02:51:18,931

anyway I guess my broader point is I

3738

02:51:24,440 --> 02:51:21,420

think the simulation hypothesis is is is

3739

02:51:26,091 --> 02:51:24,450

a bridge that you know bridges these two

3740

02:51:28,640 --> 02:51:26,101

worlds that don't agree on a lot of

3741

02:51:31,040 --> 02:51:28,650

stuff well and I would have thought I

3742

02:51:32,780 --> 02:51:31,050

would have said years ago that science

3743

02:51:36,110 --> 02:51:32,790

fiction was science fiction and and

3744

02:51:39,801 --> 02:51:36,120

these thoughts of living in a simulation

3745

02:51:42,171 --> 02:51:39,811

were just you know pure fantasy and that

3746

02:51:45,011 --> 02:51:42,181

most people wouldn't be interested in

3747

02:51:48,680 --> 02:51:45,021

the subject at all and today you look at

3748

02:51:50,780 --> 02:51:48,690

not only gaming and how popular gaming

3749

02:51:55,341 --> 02:51:50,790

is and how people want to get into these

3750

02:51:57,620 --> 02:51:55,351

you know a first-person shooter all you

3751
02:52:01,520 --> 02:51:57,630
know these alternate reality type games

3752
02:52:04,610 --> 02:52:01,530
world of warcraft or guru mist you know

3753
02:52:05,790 --> 02:52:04,620
and where you are totally immersive I

3754
02:52:08,340 --> 02:52:05,800
and

3755
02:52:13,469 --> 02:52:08,350
you have the other part of it we're not

3756
02:52:15,510 --> 02:52:13,479
necessarily gamers but Sims and the

3757
02:52:18,660 --> 02:52:15,520
ability to create your own character and

3758
02:52:20,820 --> 02:52:18,670
build your own things and and and an

3759
02:52:22,889 --> 02:52:20,830
alternate personality for yourself

3760
02:52:25,469 --> 02:52:22,899
you're building a you know your

3761
02:52:29,520 --> 02:52:25,479
character that you want to look like

3762
02:52:31,020 --> 02:52:29,530
that you desire and and the the worlds

3763
02:52:33,240 --> 02:52:31,030

that you're living in socially and

3764

02:52:37,969 --> 02:52:33,250

interacting with inside of these games

3765

02:52:40,290 --> 02:52:37,979

people are actually very okay with it

3766

02:52:42,120 --> 02:52:40,300

yeah they take it very seriously I mean

3767

02:52:43,860 --> 02:52:42,130

if I mentioned Second Life earlier you

3768

02:52:45,450 --> 02:52:43,870

mentioned the Sims right in Second Life

3769

02:52:48,030 --> 02:52:45,460

you have characters that get married

3770

02:52:50,219 --> 02:52:48,040

right with each other and then they

3771

02:52:51,960 --> 02:52:50,229

cheat with other people like it becomes

3772

02:52:54,000 --> 02:52:51,970

a very serious but if you've watched

3773

02:52:55,950 --> 02:52:54,010

ready player one which just came out

3774

02:52:58,260 --> 02:52:55,960

recently yes which is about virtual

3775

02:53:00,450 --> 02:52:58,270

reality and so so I'm actually working

3776

02:53:02,429 --> 02:53:00,460

on a book now about the simulation

3777

02:53:04,139 --> 02:53:02,439

hypothesis which is based on an article

3778

02:53:06,450 --> 02:53:04,149

that I wrote that's up on hacker noon

3779

02:53:08,700 --> 02:53:06,460

now with the stages of videogame

3780

02:53:11,280 --> 02:53:08,710

technology and how would we get from

3781

02:53:14,309 --> 02:53:11,290

where we are today to a fully immersive

3782

02:53:16,110 --> 02:53:14,319

matrix like world where we couldn't tell

3783

02:53:18,510 --> 02:53:16,120

the difference and you know virtual

3784

02:53:20,610 --> 02:53:18,520

reality is starting to move us in that

3785

02:53:22,920 --> 02:53:20,620

direction I mean if you put on virtual

3786

02:53:25,469 --> 02:53:22,930

reality glasses you are that character

3787

02:53:27,450 --> 02:53:25,479

like in in the Oasis and in that case

3788

02:53:28,920 --> 02:53:27,460

they had you ready player one they had

3789

02:53:30,990 --> 02:53:28,930

these haptic suits so you could actually

3790

02:53:32,219 --> 02:53:31,000

feel what was going on but we're seeing

3791

02:53:35,280 --> 02:53:32,229

the beginnings of that I have some

3792

02:53:38,250 --> 02:53:35,290

friends who created a ping-pong game for

3793

02:53:39,960 --> 02:53:38,260

HTC for the vibe and so I was playing

3794

02:53:44,040 --> 02:53:39,970

this game and even though it wasn't

3795

02:53:45,450 --> 02:53:44,050

photorealistic it felt really real so

3796

02:53:48,030 --> 02:53:45,460

real that I thought I was holding a

3797

02:53:50,580 --> 02:53:48,040

paddle and playing I set the paddle down

3798

02:53:52,950 --> 02:53:50,590

on the table right just instinctively

3799

02:53:54,719 --> 02:53:52,960

well it turns out there was no table it

3800

02:53:56,790 --> 02:53:54,729

was just virtual so the controller fell

3801
02:53:58,559 --> 02:53:56,800
to the floor and then I leaned against

3802
02:54:01,260 --> 02:53:58,569
the table of course there was no table

3803
02:54:03,090 --> 02:54:01,270
so I almost fell over but you can see

3804
02:54:05,790 --> 02:54:03,100
how immersive virtual reality is

3805
02:54:07,500 --> 02:54:05,800
starting to be and eventually you can

3806
02:54:09,179 --> 02:54:07,510
see where we might be able to beam that

3807
02:54:12,630 --> 02:54:09,189
stuff to the retina without needing the

3808
02:54:14,040 --> 02:54:12,640
glasses and then you're really in kind

3809
02:54:15,150 --> 02:54:14,050
of an immersive world so I think more

3810
02:54:18,120 --> 02:54:15,160
people are interested in this topic

3811
02:54:19,631 --> 02:54:18,130
today because we're seeing how immersive

3812
02:54:21,881 --> 02:54:19,641
video games can be

3813
02:54:24,390 --> 02:54:21,891

and they get to the point where you know

3814

02:54:26,620 --> 02:54:24,400

we may be inside a very sophisticated

3815

02:54:28,060 --> 02:54:26,630

video game I mean think of where the

3816

02:54:29,650 --> 02:54:28,070

technology will be a hundred years from

3817

02:54:32,650 --> 02:54:29,660

now right video games are only like 30

3818

02:54:34,331 --> 02:54:32,660

years old or 200 years from now or a

3819

02:54:36,150 --> 02:54:34,341

thousand years from now how

3820

02:54:38,501 --> 02:54:36,160

sophisticated with the video games be

3821

02:54:40,421 --> 02:54:38,511

and and Elon Musk made that argument

3822

02:54:43,211 --> 02:54:40,431

where he said you know we had pong and

3823

02:54:46,990 --> 02:54:43,221

in the 70s which was a dot and some

3824

02:54:49,301 --> 02:54:47,000

lines and now we have virtual reality

3825

02:54:50,921 --> 02:54:49,311

where you put on the glasses and you it

3826
02:54:52,961 --> 02:54:50,931
feels like you're there and then we have

3827
02:54:56,381 --> 02:54:52,971
games like no man's sky I don't know if

3828
02:54:58,331 --> 02:54:56,391
you know ya know infinite right infinite

3829
02:55:01,180 --> 02:54:58,341
great do they have like 18 quintillion

3830
02:55:03,100 --> 02:55:01,190
planets yes yeah turns out because

3831
02:55:05,230 --> 02:55:03,110
that's what 64 bits yeah that's the

3832
02:55:07,180 --> 02:55:05,240
number that's 64 bits will get you and

3833
02:55:09,520 --> 02:55:07,190
each of those are procedurally generated

3834
02:55:11,171 --> 02:55:09,530
yep right so they look like they're

3835
02:55:14,381 --> 02:55:11,181
unique but they're being generated by

3836
02:55:16,390 --> 02:55:14,391
some set of rules and so we you know

3837
02:55:18,761 --> 02:55:16,400
we're looking out at the the world and

3838
02:55:21,751 --> 02:55:18,771

we're seeing you know billions of

3839

02:55:24,341 --> 02:55:21,761

hundred billion galaxies right out there

3840

02:55:26,950 --> 02:55:24,351

with 100 billion stars each

3841

02:55:29,860 --> 02:55:26,960

are those procedurally generated are

3842

02:55:33,461 --> 02:55:29,870

they really there you know and what does

3843

02:55:34,990 --> 02:55:33,471

it mean for them to be there so so in

3844

02:55:37,150 --> 02:55:35,000

that that of course would intersect with

3845

02:55:38,381 --> 02:55:37,160

alien life and UFO question but I don't

3846

02:55:40,390 --> 02:55:38,391

think we want to go there to the yeah

3847

02:55:43,060 --> 02:55:40,400

well do that at another time but I do

3848

02:55:46,270 --> 02:55:43,070

have a week there's there's a that's a

3849

02:55:48,280 --> 02:55:46,280

that's a series of shows I have a friend

3850

02:55:53,200 --> 02:55:48,290

I mean a friend friend a friend that

3851
02:55:56,261 --> 02:55:53,210
I've known for about 20 years and he his

3852
02:55:59,860 --> 02:55:56,271
company this is a friend friend I want

3853
02:56:02,921 --> 02:55:59,870
to say this his company he went through

3854
02:56:04,690 --> 02:56:02,931
the film industry here and software

3855
02:56:11,470 --> 02:56:04,700
designing and shading and lighting and

3856
02:56:20,280 --> 02:56:11,480
stuff but his company now is AR and he

3857
02:56:30,581 --> 02:56:25,480
okay for instance he can go in take your

3858
02:56:33,540 --> 02:56:30,591
house and recreate it I mean it's done

3859
02:56:36,900 --> 02:56:33,550
with photography

3860
02:56:40,960 --> 02:56:36,910
absolutely walk around your neighborhood

3861
02:56:42,820 --> 02:56:40,970
he did Palm Springs right where you're

3862
02:56:46,719 --> 02:56:42,830
in a house in Palm Springs and you walk

3863
02:56:50,980 --> 02:56:46,729

outside and you go anywhere in Ponton it

3864

02:56:53,019 --> 02:56:50,990

is real real real you cannot tell the

3865

02:56:55,240 --> 02:56:53,029

difference it's like you're out there

3866

02:56:56,950 --> 02:56:55,250

it's not like you're out there you are

3867

02:56:58,510 --> 02:56:56,960

there you're in the middle of it and you

3868

02:57:02,200 --> 02:56:58,520

would not be able to tell the difference

3869

02:57:07,059 --> 02:57:02,210

because he's imaged it with real images

3870

02:57:08,620 --> 02:57:07,069

it's absolutely real-time spot-on crazy

3871

02:57:11,679 --> 02:57:08,630

freaked out

3872

02:57:13,809 --> 02:57:11,689

AR and it's it's here it's it's an

3873

02:57:16,870 --> 02:57:13,819

incredible technology that he has

3874

02:57:17,980 --> 02:57:16,880

developed yeah and and it's getting

3875

02:57:19,929 --> 02:57:17,990

better all the time so that's

3876

02:57:22,389 --> 02:57:19,939

interesting if he's got photorealistic

3877

02:57:25,570 --> 02:57:22,399

AR because the idea with these

3878

02:57:29,110 --> 02:57:25,580

light-filled AR which is just becoming

3879

02:57:31,090 --> 02:57:29,120

available is that it figures out you

3880

02:57:33,820 --> 02:57:31,100

know what light would come to your eye

3881

02:57:36,040 --> 02:57:33,830

based on what angle you're looking at

3882

02:57:39,040 --> 02:57:36,050

and it only has to render that part of

3883

02:57:40,540 --> 02:57:39,050

it so that it optimizes the rendering so

3884

02:57:42,490 --> 02:57:40,550

you feel like you're really there which

3885

02:57:44,920 --> 02:57:42,500

is what all this 3d technology is based

3886

02:57:47,260 --> 02:57:44,930

on going back to doom which was the

3887

02:57:48,610 --> 02:57:47,270

first first-person shooter right it gave

3888

02:57:50,769 --> 02:57:48,620

you a sense of perspective so in this

3889

02:57:52,690 --> 02:57:50,779

case he was able to image actual

3890

02:57:54,370 --> 02:57:52,700

physical places and create probably 3d

3891

02:57:56,530 --> 02:57:54,380

models based off that's right that's

3892

02:58:00,639 --> 02:57:56,540

right it's incredible to see I mean it's

3893

02:58:02,950 --> 02:58:00,649

just like you try to you try to mess it

3894

02:58:04,990 --> 02:58:02,960

up and you can't you can't you cannot

3895

02:58:07,660 --> 02:58:05,000

you cannot find because it's it's

3896

02:58:10,870 --> 02:58:07,670

actually real imaging it's incredible to

3897

02:58:15,070 --> 02:58:10,880

see and and if we ever get to the point

3898

02:58:19,960 --> 02:58:15,080

where that that type of touring test

3899

02:58:22,240 --> 02:58:19,970

right where you can tell right right and

3900

02:58:26,349 --> 02:58:22,250

you cannot you cannot I'm telling you

3901

02:58:29,679 --> 02:58:26,359

right now and are those VR glasses or AR

3902

02:58:33,660 --> 02:58:29,689

glasses yeah both okay it boasts both

3903

02:58:35,980 --> 02:58:33,670

and and I I will introduce you to him

3904

02:58:37,650 --> 02:58:35,990

okay he's really really really knowledge

3905

02:58:41,080 --> 02:58:37,660

is evolving rapidly and these are all

3906

02:58:42,040 --> 02:58:41,090

steps along the way where imagine if you

3907

02:58:44,559 --> 02:58:42,050

could do that he could do that without

3908

02:58:46,330 --> 02:58:44,569

the glasses and beam it directly into

3909

02:58:46,881 --> 02:58:46,340

our minds and now we're in the matrix

3910

02:58:48,861 --> 02:58:46,891

right now

3911

02:58:51,350 --> 02:58:48,871

have the technology their dissimulation

3912

02:58:53,511 --> 02:58:51,360

wait and it's right there because if you

3913

02:58:55,640 --> 02:58:53,521

have it if you have it like he does

3914

02:58:59,331 --> 02:58:55,650

right it's there it's on a hard drive

3915

02:59:01,011 --> 02:58:59,341

well bridging that interface which is

3916

02:59:03,171 --> 02:59:01,021

exactly what DARPA is doing right now

3917

02:59:06,650 --> 02:59:03,181

right building the interface between

3918

02:59:08,230 --> 02:59:06,660

computers and our heads and I've been

3919

02:59:12,770 --> 02:59:08,240

told that they've already you know

3920

02:59:15,381 --> 02:59:12,780

succeeded so there you go that's that's

3921

02:59:17,600 --> 02:59:15,391

a pretty Sandia that that's their focus

3922

02:59:21,591 --> 02:59:17,610

you know that's their focus right now is

3923

02:59:23,301 --> 02:59:21,601

how to get the brain computer interface

3924

02:59:26,900 --> 02:59:23,311

in the machine language to communicate

3925

02:59:28,551 --> 02:59:26,910

between the two done that's that's the

3926

02:59:30,591 --> 02:59:28,561

next big step and I think that they've

3927

02:59:32,411 --> 02:59:30,601

already done it either you have one

3928

02:59:34,730 --> 02:59:32,421

hundred percent they've already done it

3929

02:59:36,591 --> 02:59:34,740

well that's a big step because then

3930

02:59:39,411 --> 02:59:36,601

you're you're really starting to bridge

3931

02:59:42,470 --> 02:59:39,421

the electrical with the biological and

3932

02:59:45,291 --> 02:59:42,480

the chemical and you know once that's

3933

02:59:47,841 --> 02:59:45,301

done then you're at that point where you

3934

02:59:50,511 --> 02:59:47,851

can have specific images beamed in from

3935

02:59:52,251 --> 02:59:50,521

head to people which may be what's

3936

02:59:53,900 --> 02:59:52,261

happening to us right now but we're then

3937

02:59:56,511 --> 02:59:53,910

as a civilization we're getting closer

3938

02:59:58,520 --> 02:59:56,521

to that simulation point that we talked

3939

03:00:01,031 --> 02:59:58,530

about what and then it's also the

3940

03:00:07,011 --> 03:00:01,041

opposite where you get your brain

3941

03:00:08,661 --> 03:00:07,021

outputted right people think that you

3942

03:00:11,511 --> 03:00:08,671

can just take the brain and output

3943

03:00:13,671 --> 03:00:11,521

everything there and that becomes a

3944

03:00:17,511 --> 03:00:13,681

downloadable consciousness you have the

3945

03:00:19,310 --> 03:00:17,521

dream that right yes yes yes and so it's

3946

03:00:21,020 --> 03:00:19,320

a matter of so some researchers are

3947

03:00:23,480 --> 03:00:21,030

saying okay if we could just map not

3948

03:00:26,091 --> 03:00:23,490

just all the neurons in your brain but

3949

03:00:28,730 --> 03:00:26,101

exactly you know how much they're firing

3950

03:00:30,770 --> 03:00:28,740

and when and right now that's too big a

3951

03:00:32,421 --> 03:00:30,780

data set for a lot of our computers in

3952

03:00:34,850 --> 03:00:32,431

our big data right now yeah we're right

3953

03:00:36,890 --> 03:00:34,860

you're talking trillions of neurons fire

3954

03:00:39,230 --> 03:00:36,900

firing and you'd have to store that over

3955

03:00:41,150 --> 03:00:39,240

a long period of time again that would

3956

03:00:42,890 --> 03:00:41,160

that would say that consciousness is

3957

03:00:44,961 --> 03:00:42,900

something you can download digitally and

3958

03:00:48,350 --> 03:00:44,971

save and a lot of people are betting on

3959

03:00:51,491 --> 03:00:48,360

that I tend to take you know a slightly

3960

03:00:54,081 --> 03:00:51,501

more spiritual point of view where

3961

03:00:56,121 --> 03:00:54,091

consciousness may not just be the

3962

03:00:58,341 --> 03:00:56,131

neurons but might be something else that

3963

03:00:59,810 --> 03:00:58,351

we can't see in the rendered world which

3964

03:01:00,620 --> 03:00:59,820

is more like the Eastern mystical view

3965

03:01:03,380 --> 03:01:00,630

but

3966

03:01:05,179 --> 03:01:03,390

it is moving in that direction rizz I've

3967

03:01:07,310 --> 03:01:05,189

got to run credits and get out of here

3968

03:01:09,530 --> 03:01:07,320

so really quick thank you another

3969

03:01:14,150 --> 03:01:09,540

amazing conversation working everybody

3970

03:01:17,630 --> 03:01:14,160

follow you and reach out so my website

3971

03:01:20,210 --> 03:01:17,640

is Zen entrepreneur calm and you can

3972

03:01:23,660 --> 03:01:20,220

reach out to me from the website you can

3973

03:01:26,889 --> 03:01:23,670

also go to a twitter at a tree stanford

3974

03:01:29,240 --> 03:01:26,899

as well and reach me there and then

3975

03:01:31,700 --> 03:01:29,250

there's a link from my website and I

3976

03:01:33,110 --> 03:01:31,710

think from yours - hacker noon which is

3977

03:01:35,690 --> 03:01:33,120

where I write a lot of these types of

3978

03:01:39,350 --> 03:01:35,700

articles and you can also find R is at

3979

03:01:41,960 --> 03:01:39,360

on stellar he's he's actually got a

3980

03:01:44,300 --> 03:01:41,970

profile and is moving forward there too

3981

03:01:47,090 --> 03:01:44,310

as well we'll talk about on stellar in

3982

03:01:49,070 --> 03:01:47,100

the future of the internet 3.0 on

3983

03:01:50,150 --> 03:01:49,080

another show thank you so much for is

3984

03:01:52,550 --> 03:01:50,160

get some sleep

3985

03:01:55,160 --> 03:01:52,560

alright thanks for having me on again R

3986

03:01:57,530 --> 03:01:55,170

is Burke and it's very simple Zen

3987

03:02:00,230 --> 03:01:57,540

interpreter calm the links are over at

3988

03:02:01,790 --> 03:02:00,240

Jimmy church radio calm thank you so

3989

03:02:05,030 --> 03:02:01,800

much for is for doing this overtime with

3990

03:02:08,020 --> 03:02:05,040

us I know you're on the East Coast doing

3991

03:02:10,280 --> 03:02:08,030

your thing thank you so much rizz Burke

3992

03:02:12,070 --> 03:02:10,290

amazing conversation fainted blacks

3993

03:02:14,630 --> 03:02:12,080

executive producers ritika Murray on

3994

03:02:16,820 --> 03:02:14,640

shows produced by Hill J Palmer Nate

3995

03:02:18,800 --> 03:02:16,830

Dennis and Bob announcers are Steve

3996

03:02:22,219 --> 03:02:18,810

Harlow Jeeva Toa mark D Cove our

3997

03:02:25,790 --> 03:02:22,229

webmaster is drew the geek music doug

3998

03:02:28,550 --> 03:02:25,800

aldrich intro space boy space boy music

3999

03:02:30,500 --> 03:02:28,560

calm theta black is produced by kjsurya

4000

03:02:35,030 --> 03:02:30,510

the GameChanger network in syndication

4001
03:02:38,030 --> 03:02:35,040
is kgr a the planet beta black is copy

4002
03:02:39,639 --> 03:02:38,040
written 2018 by fade to black in the

4003
03:02:42,530 --> 03:02:39,649
game changer network it cannot be

4004
03:02:44,660 --> 03:02:42,540
rebroadcast downloaded copied or used

4005
03:02:46,670 --> 03:02:44,670
anywhere in the known universe without

4006
03:02:48,830 --> 03:02:46,680
written permission from fade to black or

4007
03:02:50,990 --> 03:02:48,840
the game changer network arm you know

4008
03:02:53,821 --> 03:02:51,000
jimmy church thank you to r is birth

4009
03:02:56,521 --> 03:02:53,831
tomorrow night right here

4010
03:02:59,551 --> 03:02:56,531
with Jon Rappoport and is no more fake

4011
03:03:02,551 --> 03:02:59,561
newsroom live follow me on Twitter h8

4012
03:03:05,001 --> 03:03:02,561
Church radio you can follow R is at R is

4013
03:03:09,280 --> 03:03:05,011

Stanford until tomorrow night