

1
00:00:01,010 --> 00:00:06,899
good morning everyone

2
00:00:03,658 --> 00:00:12,919
today I'm talking about my study devoted

3
00:00:06,899 --> 00:00:20,850
to field rng random number generator and

4
00:00:12,919 --> 00:00:23,429
just readings right altitude of random

5
00:00:20,850 --> 00:00:28,109
generator during coherent events would

6
00:00:23,429 --> 00:00:30,710
show animalistic statistical biases but

7
00:00:28,109 --> 00:00:36,539
little is known about our energies

8
00:00:30,710 --> 00:00:38,969
output reliability generalization study

9
00:00:36,539 --> 00:00:47,729
for figured energy studies would be

10
00:00:38,969 --> 00:00:51,689
expected but what is reliability define

11
00:00:47,729 --> 00:00:54,689
as consistency or stability of

12
00:00:51,689 --> 00:00:57,448
measurement channel measured be

13
00:00:54,689 --> 00:01:00,599
confirmed by further measurements or

14
00:00:57,448 --> 00:01:05,548
observations if you measure the same

15
00:01:00,600 --> 00:01:10,320
thing would you get the same Sheen same

16
00:01:05,549 --> 00:01:14,790
scope for example case of weight machine

17
00:01:10,319 --> 00:01:21,780
test retest first weight machine shows

18
00:01:14,790 --> 00:01:24,780
52 major 50 kilogram second if the

19
00:01:21,780 --> 00:01:30,450
weight machine has high reliability we

20
00:01:24,780 --> 00:01:36,560
can get same similar value even if

21
00:01:30,450 --> 00:01:40,549
condition differs stable value is got

22
00:01:36,560 --> 00:01:40,549
even if condition different

23
00:01:44,409 --> 00:01:55,129
but if lowly liability so different but

24
00:01:49,099 --> 00:02:00,649
even if same condition so intricate

25
00:01:55,129 --> 00:02:04,569
trust correlation is used in variability

26
00:02:00,650 --> 00:02:10,250
index defined as a ratio of variance I

27
00:02:04,569 --> 00:02:15,669
see she is the ratio of variance within

28
00:02:10,250 --> 00:02:19,159
variance and between variants so become

29

00:02:15,669 --> 00:02:26,329
- between variance is more than within

30
00:02:19,159 --> 00:02:28,430
variance case of arranged outputs we

31
00:02:26,330 --> 00:02:32,230
examine whether measurement can

32
00:02:28,430 --> 00:02:36,140
reproduce same score or - same target

33
00:02:32,229 --> 00:02:43,009
exploring optimal conditions which show

34
00:02:36,139 --> 00:02:46,000
good enough reliability my purpose to

35
00:02:43,009 --> 00:02:49,009
evaluate our energy output reliability

36
00:02:46,000 --> 00:02:52,780
exploratory on the assumption that our

37
00:02:49,009 --> 00:02:57,769
angel which concerns with consciousness

38
00:02:52,780 --> 00:03:00,949
how to apply filter on Angie using same

39
00:02:57,769 --> 00:03:06,069
event repetitions movie theater

40
00:03:00,949 --> 00:03:06,069
experiment is good for current purpose

41
00:03:07,810 --> 00:03:19,329
assuming audience emotion influence

42
00:03:12,250 --> 00:03:19,329
direction of arrange outputs up them

43
00:03:21,629 --> 00:03:34,560

at which transition pattern depends on

44

00:03:24,479 --> 00:03:38,669

movie scenes different patterns will be

45

00:03:34,560 --> 00:03:45,569

observed in case of other movie in case

46

00:03:38,669 --> 00:03:50,509

of horror movie animation exciting nesaf

47

00:03:45,569 --> 00:03:55,650

and so on and asking how long period

48

00:03:50,509 --> 00:04:00,780

level would be optimal to capture up

49

00:03:55,650 --> 00:04:07,920

down cycle faster cycle or through a

50

00:04:00,780 --> 00:04:12,920

cycle so we analyze the dependent

51

00:04:07,919 --> 00:04:15,619

variable to check the reliability

52

00:04:12,919 --> 00:04:19,639

current study used

53

00:04:15,620 --> 00:04:24,019

DWT discrete discrete wavelet transform

54

00:04:19,639 --> 00:04:27,659

the compulsion with heart filter

55

00:04:24,019 --> 00:04:32,930

computing scale questions and detail

56

00:04:27,660 --> 00:04:42,350

coefficients both of them is

57

00:04:32,930 --> 00:04:46,920

standardized score for example creating

58
00:04:42,350 --> 00:04:50,550
the detail squad first DJ's question is

59
00:04:46,920 --> 00:05:00,810
computed by difference between two sets

60
00:04:50,550 --> 00:05:02,910
for us and second is the same and scale

61
00:05:00,810 --> 00:05:06,899
coefficient is computed by summation

62
00:05:02,910 --> 00:05:14,700
between original to Rosco us in the same

63
00:05:06,899 --> 00:05:20,669
same same and now we get information of

64
00:05:14,699 --> 00:05:23,129
details coefficients so DWT decomposed

65
00:05:20,670 --> 00:05:27,270
original outputs into information of

66
00:05:23,129 --> 00:05:29,189
detail coefficients all the and detailed

67
00:05:27,269 --> 00:05:32,490
coefficients are independent from each

68
00:05:29,189 --> 00:05:33,939
other including information of period

69
00:05:32,490 --> 00:05:38,889
ranks

70
00:05:33,939 --> 00:05:38,889
there's any ranks of movie film could be

71
00:05:39,069 --> 00:05:44,209
compressive making it possible to

72
00:05:41,509 --> 00:05:50,120
examine how long period with length

73
00:05:44,209 --> 00:05:55,489
would be optimal so data structure

74
00:05:50,120 --> 00:06:01,490
becomes repetition and time length for

75
00:05:55,490 --> 00:06:08,269
each level as she she become high

76
00:06:01,490 --> 00:06:13,160
between balances higher than with vision

77
00:06:08,269 --> 00:06:16,759
variants for each level time index P is

78
00:06:13,160 --> 00:06:20,030
created when level one sample sizes Raj

79
00:06:16,759 --> 00:06:24,069
and whereas upper levels have small size

80
00:06:20,029 --> 00:06:24,069
finally sample size becomes two

81
00:06:25,060 --> 00:06:34,910
procedure we conducted at movie theaters

82
00:06:31,449 --> 00:06:38,539
experiment experiment to run on the mg

83
00:06:34,910 --> 00:06:50,660
connected with PC in the baggage by not

84
00:06:38,540 --> 00:06:53,350
yet be a movie being a movie and doing

85
00:06:50,660 --> 00:06:53,350
it being

86

00:06:55,220 --> 00:07:08,560
so our previous data set URIs departures

87
00:07:03,668 --> 00:07:12,740
which is suddenly bit for shoot movies

88
00:07:08,560 --> 00:07:16,850
at the classes and Japanese animation

89
00:07:12,740 --> 00:07:23,410
movies and newly fizzy experiments

90
00:07:16,850 --> 00:07:30,050
conducted additional horror movies and

91
00:07:23,410 --> 00:07:32,900
Star Wars and mystical results show for

92
00:07:30,050 --> 00:07:38,870
each level J using detail coefficients

93
00:07:32,899 --> 00:07:42,228
to this range 90% confidence interval I

94
00:07:38,870 --> 00:07:50,449
she she arranged from negative infinity

95
00:07:42,228 --> 00:07:56,110
to 1 point 2 0 maximally expecting 0 is

96
00:07:50,449 --> 00:07:56,110
that so high I see she had longer period

97
00:07:57,069 --> 00:08:01,209
short movies and is out

98
00:08:01,430 --> 00:08:13,769
to small sample size becoming Erebus Raj

99
00:08:07,288 --> 00:08:16,288
so examination period and the animation

100
00:08:13,769 --> 00:08:21,109

movie showed partially hided abilities

101

00:08:16,288 --> 00:08:26,668

at especially longer periods from movies

102

00:08:21,110 --> 00:08:32,330

showed no reliability Star Wars Episode

103

00:08:26,668 --> 00:08:32,329

seven fell to find high reliability

104

00:08:33,200 --> 00:08:41,209

mystery horror showing partially high at

105

00:08:37,288 --> 00:08:45,139

longer periods at game using Sairam

106

00:08:41,208 --> 00:08:49,769

so the trend study analyzed and

107

00:08:45,139 --> 00:08:53,069

evaluated interim Obi reliabilities of

108

00:08:49,769 --> 00:08:55,439

our energy outputs ashes were used to

109

00:08:53,070 --> 00:08:57,660

measure the reproducibility of our range

110

00:08:55,440 --> 00:09:04,860

at which corresponding to particular

111

00:08:57,659 --> 00:09:07,860

movie scenes we found January 5th our

112

00:09:04,860 --> 00:09:11,820

energy outputs are not reliable but

113

00:09:07,860 --> 00:09:19,339

siren produced relative high as she is

114

00:09:11,820 --> 00:09:19,339

doing 500 to 1000 second interval

115
00:09:19,610 --> 00:09:26,329
negative liabilities were often a shown

116
00:09:22,708 --> 00:09:26,328
two shorter period

117
00:09:31,198 --> 00:09:38,528
some results remain unexplained the

118
00:09:35,679 --> 00:09:41,620
movie departure showed quite lowly

119
00:09:38,528 --> 00:09:45,789
liability during control conditions and

120
00:09:41,620 --> 00:09:49,959
expected to be but we are unable to

121
00:09:45,789 --> 00:09:53,469
interpret this data because the

122
00:09:49,958 --> 00:09:56,289
experimental travel to both the pre and

123
00:09:53,470 --> 00:10:04,089
post measurement sessions of the batch

124
00:09:56,289 --> 00:10:08,879
of beer train or car so I cannot explain

125
00:10:04,089 --> 00:10:13,860
the death dater okay first the

126
00:10:08,879 --> 00:10:13,860
examinations will be expected thank you

127
00:10:14,529 --> 00:10:22,558
[Music]

128
00:10:16,799 --> 00:10:28,389
thank you Shimizu son questions Garrett

129
00:10:22,558 --> 00:10:33,578
so as you know I think that your effect

130
00:10:28,389 --> 00:10:36,068
may be an experiment or effect and in

131
00:10:33,578 --> 00:10:40,328
which you have an expectation of what

132
00:10:36,068 --> 00:10:45,099
the RNG will do and it does it so you

133
00:10:40,328 --> 00:10:49,448
said that the output direction depends

134
00:10:45,100 --> 00:10:52,959
upon the movie scenes that happy ones go

135
00:10:49,448 --> 00:10:58,539
one direction sad ones the other or or

136
00:10:52,958 --> 00:11:02,528
whatever if you have somebody different

137
00:10:58,539 --> 00:11:06,338
who runs the RNG do you get the same

138
00:11:02,528 --> 00:11:13,928
directions other people and try to

139
00:11:06,339 --> 00:11:15,819
experiment yes so I think including

140
00:11:13,928 --> 00:11:20,528
experiment effect

141
00:11:15,818 --> 00:11:22,299
so without different becomes different

142
00:11:20,528 --> 00:11:24,838
so different people get different

143

00:11:22,299 --> 00:11:24,838
results

144
00:11:27,409 --> 00:11:37,319
experiment effect cannot explain all of

145
00:11:33,509 --> 00:11:45,710
the variants I think what can it not

146
00:11:37,320 --> 00:11:57,030
explain because random number generator

147
00:11:45,710 --> 00:12:01,800
detect the nature characteristics not

148
00:11:57,029 --> 00:12:08,009
only experimental effect I think okay I

149
00:12:01,799 --> 00:12:10,469
hope you will write more about this yeah

150
00:12:08,009 --> 00:12:12,000
that was my question as well but I

151
00:12:10,470 --> 00:12:15,180
wanted to follow up did you ever run

152
00:12:12,000 --> 00:12:16,919
with no one no experimenter just leave

153
00:12:15,179 --> 00:12:18,919
the random number generator when the

154
00:12:16,919 --> 00:12:22,110
movie is running

155
00:12:18,919 --> 00:12:24,539
no no experimenter just the random

156
00:12:22,110 --> 00:12:31,310
number generator in the movie when

157
00:12:24,539 --> 00:12:36,329

you're not there so you said my

158

00:12:31,309 --> 00:12:40,349

experiment if you are not there there is

159

00:12:36,330 --> 00:12:44,610

no experimenter in fact so is the movie

160

00:12:40,350 --> 00:12:46,970

affecting it or if you're not there so I

161

00:12:44,610 --> 00:12:46,970

smiled

162

00:12:49,350 --> 00:12:53,589

thank you and I believe now we need to

163

00:12:51,879 --> 00:12:54,180

go here Chantal for the pictures all

164

00:12:53,589 --> 00:12:57,330

right

165

00:12:54,179 --> 00:12:57,329

[Applause]