



1
00:00:07,670 --> 00:00:06,070
hi i'm lucia abramian i'm a software

2
00:00:10,310 --> 00:00:07,680
engineer at nasa's jet propulsion

3
00:00:14,789 --> 00:00:10,320
laboratory i started working at jpl in

4
00:00:16,150 --> 00:00:14,799
2003 and this was around the time where

5
00:00:19,109 --> 00:00:16,160
the mars exploration rovers were

6
00:00:21,910 --> 00:00:19,119
launching this was in summer and the

7
00:00:25,029 --> 00:00:21,920
atmosphere at jpl was amazing for a high

8
00:00:27,670 --> 00:00:25,039
school intern who's 16 years old this

9
00:00:30,470 --> 00:00:27,680
was the most exciting place to be

10
00:00:32,310 --> 00:00:30,480
the team that i was on my first year was

11
00:00:34,470 --> 00:00:32,320
working on writing operations planning

12
00:00:36,790 --> 00:00:34,480
software for the mars expiration rovers

13
00:00:38,869 --> 00:00:36,800

so as a high school student i actually

14

00:00:41,110 --> 00:00:38,879

got a chance to write code

15

00:00:44,549 --> 00:00:41,120

help with the testing and help

16

00:00:59,590 --> 00:00:44,559

scientists with the preparation for

17

00:01:03,590 --> 00:01:01,590

so i was getting so much out of the

18

00:01:05,590 --> 00:01:03,600

internships they encourage what a

19

00:01:07,670 --> 00:01:05,600

scientist has to go through they tell

20

00:01:10,230 --> 00:01:07,680

you that you have to write a proposal

21

00:01:12,630 --> 00:01:10,240

you have to go through the same steps of

22

00:01:13,910 --> 00:01:12,640

writing a final report and documenting

23

00:01:16,230 --> 00:01:13,920

your progress

24

00:01:18,469 --> 00:01:16,240

and five years later these scientists

25

00:01:27,030 --> 00:01:18,479

are still excited about being a part of

26

00:01:31,830 --> 00:01:29,429

athlete is the all-terrain hex slimmed

27

00:01:34,230 --> 00:01:31,840

extraterrestrial explorer

28

00:01:37,030 --> 00:01:34,240

athlete has a six-sided frame which

29

00:01:39,350 --> 00:01:37,040

means it has six different faces each

30

00:01:42,710 --> 00:01:39,360

face has stereo pair of cameras which

31

00:01:43,749 --> 00:01:42,720

act like eyes human eyes and can return

32

00:01:46,950 --> 00:01:43,759

images

33

00:01:50,069 --> 00:01:46,960

that can be in 3d

34

00:01:54,069 --> 00:01:50,079

the rover has six legs and each leg has

35

00:01:58,870 --> 00:01:55,990

special thing about this is that not

36

00:02:01,749 --> 00:01:58,880

only can we drive on wheels but we can

37

00:02:04,069 --> 00:02:01,759

use the legs to walk around

38

00:02:06,230 --> 00:02:04,079

over large rocks or in terrain that we

39

00:02:08,710 --> 00:02:06,240

couldn't necessarily drive over

40

00:02:11,029 --> 00:02:08,720

now i'm looking at ways to allow

41

00:02:13,670 --> 00:02:11,039

operators to enter an immersive

42

00:02:15,990 --> 00:02:13,680

environment where they can

43

00:02:18,470 --> 00:02:16,000

see and almost feel what athlete is

44

00:02:20,309 --> 00:02:18,480

feeling when they're in this environment

45

00:02:22,070 --> 00:02:20,319

and this involves a lot of research and

46

00:02:24,470 --> 00:02:22,080

a lot of different fields of computer

47

00:02:27,030 --> 00:02:24,480

science

48

00:02:29,430 --> 00:02:27,040

when i tell my friends about what i do

49

00:02:31,750 --> 00:02:29,440

they are amazed they can't believe it