1
00:00:11,959 --> 00:00:10,289
floating serenely on a mountain lake

2
00:00:14,580 --> 00:00:11,969
high in the central Andes of Chile

3
00:00:17,310 --> 00:00:14,590
NASA's prototype planetary Lake Lander

4
00:00:19,859 --> 00:00:17,320
is in reality testing adaptive robotic

5
00:00:22,050 --> 00:00:19,869
systems project leader dr. Nathalie

6
00:00:24,900 --> 00:00:22,060
Cabral explains her team's work on this

7
00:00:27,929 --> 00:00:24,910
smart robot so to explore laguna negra

8
00:00:29,700 --> 00:00:27,939
we have the planetary late lender it

9
00:00:31,460 --> 00:00:29,710
will have an adaptive system it will be

10
00:00:34,830 --> 00:00:31,470
able to understand its environment and

11
00:00:37,080 --> 00:00:34,840
act upon what changes in the environment

12
00:00:39,779 --> 00:00:37,090
on its own so we are basically

13
00:00:43,139 --> 00:00:39,789

transferring the power of decision to

14
00:00:46,500 --> 00:00:43,149
the probe and past exploration we were

15
00:00:48,180 --> 00:00:46,510
limited to talking to a robot once or

16
00:00:50,400 --> 00:00:48,190
twice a day in the best-case scenarios

17
00:00:53,160 --> 00:00:50,410
so there is a large amount of time that

18
00:00:54,810 --> 00:00:53,170
is not being used for the mission we

19
00:00:57,750 --> 00:00:54,820
started to develop what we call adaptive

20
00:01:01,979 --> 00:00:57,760
systems and basically that was for the

21
00:01:03,990 --> 00:01:01,989
robot to decide if what it was seeing in

22
00:01:07,350 --> 00:01:04,000
the field was relevant to the mission

23
00:01:10,560 --> 00:01:07,360
objectives even if it was outside of a

24
00:01:12,390 --> 00:01:10,570
plan the robot was capable of saying I

25
00:01:15,660 --> 00:01:12,400
need to go to point B but what I'm

26
00:01:17,850 --> 00:01:15,670
seeing here right now seems to be more

27
00:01:22,219 --> 00:01:17,860
important and more relevant and I need

28
00:01:26,630 --> 00:01:24,929
for more information on these topics go