

Simulated Martian Terrain



Obstacle Avoidance



Rover Retrieval



Mineral Identification

1
00:00:00,620 --> 00:00:08,740

[Music]

2
00:00:13,700 --> 00:00:17,800

[Background voices]

3
00:00:18,720 --> 00:00:23,820

>>One of the hardest things about the rover missions here at NCAS is not necessarily the

4
00:00:23,820 --> 00:00:29,560

technical aspects of each individual part of our robot but also working together and coming together as a

5
00:00:29,560 --> 00:00:33,322

team in order to make decisions on the floor for what we should do with the robot.

6
00:00:33,322 --> 00:00:36,760

The robot is just a tool but the people are what drives it.

7
00:00:36,760 --> 00:00:41,000

>>Three, two, one, begin.

8
00:00:41,480 --> 00:00:46,800

[Background noises]

9
00:00:47,320 --> 00:00:52,260

>>We started out designing our rover and we made it as efficient as possible for the terrain

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00:00:52,270 --> 00:00:55,399

that they were giving us, so we used tracks instead of wheels, so that we could go over rocks,

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00:00:55,399 --> 00:00:56,980

that sort of thing.

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00:00:56,980 --> 00:01:02,330

And then we programmed it so it was able to scoop up rock samples.

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00:01:02,330 --> 00:01:06,720

And we tested those and we were able to identify different minerals with our programs using

14

00:01:06,720 --> 00:01:07,800

different sensors.

15

00:01:07,800 --> 00:01:13,090

>>This is definitely really close to work experience, like a deadline or a project, you have to

16

00:01:13,090 --> 00:01:17,430

finish it, sometimes you have to stay up late at the hotel, and work extra hours, you just

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00:01:17,430 --> 00:01:18,900

have to get it done.

18

00:01:18,900 --> 00:01:21,390

And that's something the classroom definitely would not give you.

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00:01:21,390 --> 00:01:24,910

>>In class, there's a lot of theory and a lot of understanding of why things do the things

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00:01:24,910 --> 00:01:29,470

they do, but you don't really get experience in building, and creating, and going off script

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00:01:29,470 --> 00:01:32,979

and making something yourself, and feeling like you're making something out of nothing.

22

00:01:32,979 --> 00:01:37,390

And that was something I've never really experienced

before in this context- and I really, really

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00:01:37,390 --> 00:01:39,200

appreciate having that opportunity.

24

00:01:39,360 --> 00:01:43,880

[Background noises]

25

00:01:48,080 --> 00:01:52,460

[Cheering/moaning]

26

00:01:57,760 --> 00:02:02,860

[Music/Background noises]

27

00:02:08,280 --> 00:02:13,140

>>I was kind of taken by surprise with how much passion there was in the workforce here.

28

00:02:13,140 --> 00:02:17,959

Every time I asked an employee questions, they were always just instantly jumping forward

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00:02:17,959 --> 00:02:21,540

and giving me lengthy explanations because that's what they do and they all love it.

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00:02:21,540 --> 00:02:25,379

>>This was one of the best experiences, academically and professionally I've ever had.