1
00:00:05,930 --> 00:00:07,700
>> I'M ALEX SCHEPELMANN,
AND I'M A ROBOTICS

2
00:00:07,700 --> 00:00:09,250
AND COMPUTATIONAL
MODELING ENGINEER

3
00:00:09,250 --> 00:00:11,910
WORKING WITH THE CROSS-CUTTING
COMPUTATIONAL MODELING PROJECT

4
00:00:11,910 --> 00:00:13,760
AT NASA GLENN RESEARCH CENTER.

5
00:00:13,760 --> 00:00:15,920
AS NASA MOVES FORWARD
WITH ITS ARTEMIS PROGRAM

6
00:00:15,920 --> 00:00:18,460
TO RETURN HUMANS TO THE MOON
AND ESTABLISH A SUSTAINABLE

7
00:00:18,460 --> 00:00:20,779
PRESENCE THERE,
SCIENTISTS AND ENGINEERS

8
00:00:20,779 --> 00:00:23,110
AT GLENN RESEARCH CENTER
ARE USING SOPHISTICATED,

9
00:00:23,110 --> 00:00:25,190
COMPUTATIONAL MODELING
TECHNIQUES TO UNDERSTAND

10
00:00:25,190 --> 00:00:27,070
RISKS TO ASTRONAUT HEALTH.

11
00:00:27,070 --> 00:00:29,800

OUR SOFTWARE MODELS USE MACHINE
LEARNING AND DIGITAL SIMULATION

12
00:00:29,800 --> 00:00:32,050
TECHNIQUES TO HELP NASA
DECIDE WHICH MEDICATIONS

13
00:00:32,050 --> 00:00:34,500
AND MEDICAL EQUIPMENT
ARE MOST LIKELY TO BE NEEDED

14
00:00:34,500 --> 00:00:36,230
SHOULD AN ASTRONAUT
BECOME ILL OR INJURED

15
00:00:36,230 --> 00:00:37,710
DURING A MISSION.

16
00:00:37,710 --> 00:00:41,000
OTHER MODELS DEVELOPED BY CCMP
HELP WITH MISSION PLANNING.

17
00:00:41,000 --> 00:00:43,160
FOR EXAMPLE, ONE OF OUR
SIMULATIONS DETERMINES

18
00:00:43,160 --> 00:00:45,070
HOW MUCH DRINKING WATER
IS NEEDED TO KEEP THE RISK

19
00:00:45,070 --> 00:00:46,880
OF ASTRONAUTS DEVELOPING
RENAL STONES

20
00:00:46,880 --> 00:00:48,270
TO A REASONABLE LEVEL.

21
00:00:48,270 --> 00:00:50,290
THE COMPUTATIONAL MODELS
WE DEVELOP WILL HELP