



1
00:00:00,186 --> 00:00:07,196
[Allison:] My name is Allison
Wolff and I work at NASA.

2
00:00:07,786 --> 00:00:16,336
I have the coolest IT job at NASA, because
what I get to do is take these ideas

3
00:00:16,426 --> 00:00:20,866
that these really smart people
have and make them a reality.

4
00:00:21,756 --> 00:00:27,726
I manage a program called IT Labs, and in the
IT Labs what we essentially do is research

5
00:00:27,756 --> 00:00:30,836
and development of Information Technology.

6
00:00:31,596 --> 00:00:40,616
We will look at new technologies, computer
systems, network improvements, cool applications

7
00:00:40,616 --> 00:00:45,376
or software, and we'll test them out
and we'll see if these are things

8
00:00:45,426 --> 00:00:48,516
that we can use across the agency.

9
00:00:48,516 --> 00:00:54,366
We even get into some of the newer technologies
like mobile applications, testing out things

10
00:00:54,366 --> 00:00:59,706
like iPads and iPhones and Androids,
so it's a pretty broad scope

11
00:00:59,746 --> 00:01:02,006

of what we do but it's all very exciting.

12

00:01:03,216 --> 00:01:05,396

[Antja:] My name is Antja
Chambers and I work at NASA.

13

00:01:06,686 --> 00:01:09,916

I work in the Portable Life
Support Systems group.

14

00:01:10,886 --> 00:01:15,416

That is a very long term for I work with the
backpack that goes on the back of the suit.

15

00:01:15,666 --> 00:01:19,886

The backpack provides the cooling water,
the breathing air supply and return,

16

00:01:20,306 --> 00:01:25,676

as well as any other communication and
power that the space suit would need

17

00:01:25,676 --> 00:01:27,736

or that the astronauts would need
while they are in the spacesuit.

18

00:01:28,616 --> 00:01:30,806

The spacesuits in general are cool.

19

00:01:31,756 --> 00:01:36,296

There's so much- basically the spacesuit
is like its own separate space ship.

20

00:01:36,296 --> 00:01:41,256

It has to keep the astronaut alive, it
has to in very extreme environments.

21

00:01:41,536 --> 00:01:46,766

The vacuum of space is probably as extreme
as they can come, and so I think it's just

22

00:01:46,766 --> 00:01:52,516

so cool thinking you that have this mini space ship that is meant to sustain life.

23

00:01:53,486 --> 00:01:55,846

[CJ:] My name is CJ Kanelakos and I work at NASA.

24

00:01:57,356 --> 00:02:03,026

I am a mechanical design engineer and I work on Robonaut, Robonaut 2 actually.

25

00:02:03,386 --> 00:02:06,476

Robonaut 2 is a fully dexterous humanoid robot,

26

00:02:07,036 --> 00:02:10,976

and that just basically means it looks similar to a human.

27

00:02:10,976 --> 00:02:13,756

It's about the same size as a human,

28

00:02:13,756 --> 00:02:17,856

it can work in the same workspace or the same area as a human.

29

00:02:18,226 --> 00:02:24,496

We currently have a Robonaut 2 on the International Space Station but it's a torso

30

00:02:24,496 --> 00:02:30,996

and up, so it's just from the waist up and to the head, and we are currently building,

31

00:02:31,306 --> 00:02:33,886

designing and building legs for Robonaut 2.

32

00:02:34,026 --> 00:02:39,456

I love that my job is challenging
and it's engaging, it's really fun,

33
00:02:39,576 --> 00:02:44,126
getting to build the robots is cool, you know
after we have our parts manufactured and we get

34
00:02:44,126 --> 00:02:47,516
to put them together and then you turn the
robot on for the first time and you get

35
00:02:47,516 --> 00:02:50,606
to see it move that's really cool,
you know we designed all these parts,

36
00:02:50,676 --> 00:02:54,216
we put together these bearings, these motors,

37
00:02:54,216 --> 00:02:57,136
and all of a sudden it moves
and looks like a robot.

38
00:02:58,406 --> 00:03:05,686
[Allison:] Growing up I did not consider math
or science or technology to really be my thing.

39
00:03:06,066 --> 00:03:09,926
In fact I was sometimes a
little intimidated by it.

40
00:03:09,926 --> 00:03:16,956
I was very surprised to learn that not only
did I really enjoy Information Technology

41
00:03:16,956 --> 00:03:20,236
but that I kind of had a knack for it.

42
00:03:20,236 --> 00:03:25,956
Which was a big surprise to me, considering
that my background was, was art and writing.

43
00:03:26,546 --> 00:03:32,766
[CJ:] When I was in sixth grade I had a math teacher that really saw my potential for math

44
00:03:33,496 --> 00:03:37,646
and she's the one that got me into the accelerated math programs.

45
00:03:37,646 --> 00:03:43,126
When I was in high school though one of my friends introduced me to our engineering team,

46
00:03:43,306 --> 00:03:48,546
I went to an all girls private school, and so we had an all girls engineering team.

47
00:03:48,546 --> 00:03:55,026
I found out engineering can be kind of a combination of art and science and math.

48
00:03:55,026 --> 00:04:01,166
As a young female that liked to, you know, draw and paint and to do more artistic kinds

49
00:04:01,166 --> 00:04:04,646
of stuff, engineering was a really good combination of those things.

50
00:04:04,946 --> 00:04:06,096
[Antja:] I'm an Air Force brat.

51
00:04:06,096 --> 00:04:12,906
My, we've lived everywhere, probably moved every three or four years, I was born in Germany,

52
00:04:12,906 --> 00:04:17,476
I went to Japan, lived in England, and then my dad finally retired in San Antonio,

53
00:04:17,596 --> 00:04:23,106
and so I think that my exposure to a lot of the
air shows, exposure to the aircraft that are

54
00:04:23,106 --> 00:04:28,876
on Air Force bases kind of sparked my interest
in kind of heavy machinery I guess you can say.

55
00:04:29,166 --> 00:04:33,886
It eventually grew to a genuine
interest in space.

56
00:04:34,046 --> 00:04:39,296
I participated in the High School Aerospace
Scholars program, which is or was then sponsored

57
00:04:39,296 --> 00:04:43,236
at Johnson Space Center and still is, and
is still an ongoing program

58
00:04:43,486 --> 00:04:47,936
where basically my junior year I got a chance to
spend a week at NASA and work with other teams,

59
00:04:48,026 --> 00:04:52,526
which I think truly opened my eyes to
wanting to actually finally go to NASA.

60
00:04:54,076 --> 00:04:57,626
[CJ:] I really didn't know how
technology influenced people's lives,

61
00:04:57,626 --> 00:04:59,596
I really didn't think that much about it.

62
00:04:59,836 --> 00:05:04,146
It wasn't until I got here and started learning
about the applications of Robonaut two,

63

00:05:04,146 --> 00:05:09,866

I was like 'wow, there are really are a lot of applications, even for the things we do at NASA,

64

00:05:09,866 --> 00:05:13,726

but just in general there's a lot of really cool applications for technology

65

00:05:13,726 --> 00:05:16,926

that just make a huge difference in peoples' lives.'

66

00:05:16,926 --> 00:05:22,076

[Antja:] Some fields feel like there's not a lot of women present, engineering is one included,

67

00:05:22,396 --> 00:05:27,186

and so we need all the girls we can get and we have plenty of women that work at NASA

68

00:05:27,466 --> 00:05:31,506

and so don't use that as an obstacle ever for whatever you choose to do in your life.

69

00:05:33,086 --> 00:05:38,056

[Allison:] It's easy to feel pressure to do, to fit one mold or be one thing,

70

00:05:39,616 --> 00:05:43,186

and I don't think you have to be.

71

00:05:43,186 --> 00:05:46,196

I think, I think you can be a lot of things.

72

00:05:46,446 --> 00:05:58,106

I'm a mom, I'm also an art nerd slash IT geek, I love sports still, so I guess I'm an athlete,

73

00:05:59,606 --> 00:06:06,006

and I'm a lot of things and I

enjoy being all of those things.

74

00:06:06,006 --> 00:06:09,466

And it's fun, it's great.

75

00:06:11,316 --> 00:06:14,186

[Antja:] I always say to
definitely give it a chance.

76

00:06:14,286 --> 00:06:15,526

I know that it's hard.

77

00:06:15,686 --> 00:06:19,786

If it were easy, everyone would be doing it.

78

00:06:21,366 --> 00:06:23,296

But it's really worth the effort.

79

00:06:23,976 --> 00:06:29,036

[CJ:] Stay motivated, turn to your
family and your friends and to your faith

80

00:06:29,156 --> 00:06:32,276

for help, and just don't give up.