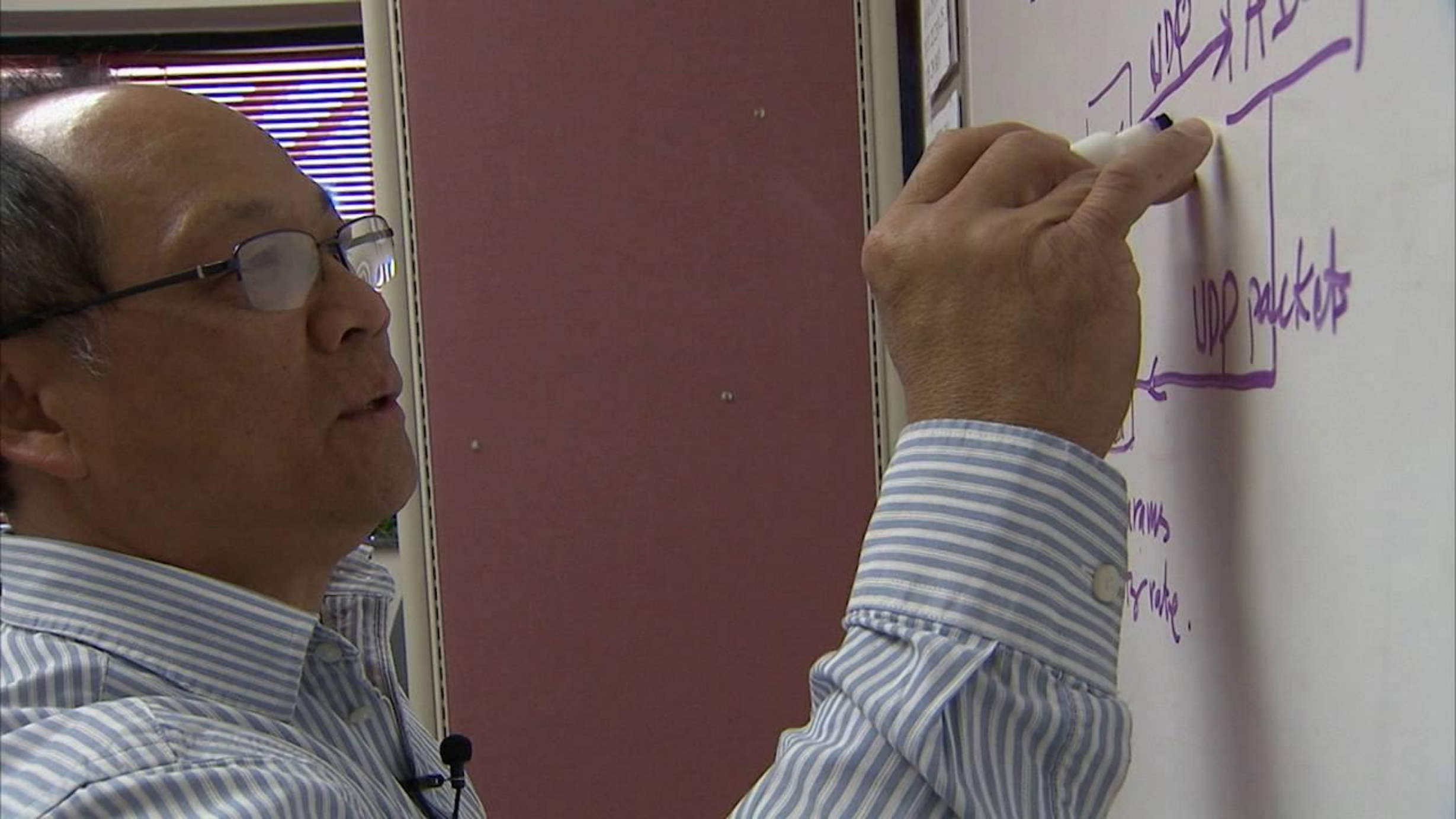
UDP packets

1
00:00:00,506 --> 00:00:11,736
[Music]

2
00:00:12,236 --> 00:00:17,626
>> When I was in Vietnam, when
I was really young in Vietnam,

3
00:00:18,456 --> 00:00:24,636
I was inspired by
NASA space program.

4
00:00:24,636 --> 00:00:28,816
I really wish I can be an
engineer or a worker for NASA

5
00:00:29,806 --> 00:00:33,596
but I know that this is
impossible for me to become one.

6
00:00:33,596 --> 00:00:37,766
When I resettled here through
the refugee resettlement

7
00:00:37,766 --> 00:00:41,756
program, I still
thought that I cannot,

8
00:00:42,416 --> 00:00:45,506
you know have any
chance to work for NASA.

9
00:00:45,756 --> 00:00:49,576
I want to pursue what they
call the American dream, okay,

10
00:00:49,876 --> 00:00:51,096
to have a good life here.

11
00:00:52,056 --> 00:00:53,806

And I quit my full time job

12
00:00:53,986 --> 00:00:59,006
and then attend the Long Beach
City College after the transfer

13
00:00:59,006 --> 00:01:02,936
to CSU Long Beach and finish
off my degree in BS degree

14
00:01:02,936 --> 00:01:04,636
for electrical engineering.

15
00:01:05,416 --> 00:01:07,436
The education is the yardstick

16
00:01:07,546 --> 00:01:09,306
that measure the
quality of life.

17
00:01:09,696 --> 00:01:13,056
This one says about
35 parameters

18
00:01:13,146 --> 00:01:15,966
and then the rest is flow.

19
00:01:18,526 --> 00:01:21,086
I am Richard Hang and I
am a electronic engineer

20
00:01:21,086 --> 00:01:22,976
at NASA Armstrong
Flight Research Center.

21
00:01:23,516 --> 00:01:26,246
[Counting]

22
00:01:26,746 --> 00:01:30,096

I am currently serving
as the Chief of Sensor

23
00:01:30,096 --> 00:01:33,106
and System Development
Branch in Research

24
00:01:33,106 --> 00:01:34,966
and Engineering Directorate.

25
00:01:35,516 --> 00:01:39,656
When a project is coming in
for some kind of research,

26
00:01:39,896 --> 00:01:44,506
they want to have sensors
put around aircraft or put

27
00:01:44,506 --> 00:01:46,376
around equipment that they want

28
00:01:46,666 --> 00:01:49,396
to measure something
to collect the data.

29
00:01:49,396 --> 00:01:51,926
Okay let me check
here, connect this.

30
00:01:52,346 --> 00:01:56,466
We use a lot of different kind
of sensors, pressures, strain,

31
00:01:56,656 --> 00:02:01,606
you know temperatures and
then the data will flow

32
00:02:01,606 --> 00:02:03,126
and then they collect
it, archive,

33
00:02:03,316 --> 00:02:06,606
save it into the local drive.

34
00:02:06,606 --> 00:02:10,316
And that's when we
download it after the flight

35
00:02:10,926 --> 00:02:12,896
for post flight analysis.

36
00:02:12,966 --> 00:02:16,546
And then some time
the project required

37
00:02:16,616 --> 00:02:21,756
to transmit real time those
data down to the ground,

38
00:02:21,916 --> 00:02:25,966
so we transmit those to the
ground, to the control room

39
00:02:25,966 --> 00:02:29,796
in the floor and the engineer
can view that in real time.

40
00:02:31,596 --> 00:02:31,836
Hi Moshe.

41
00:02:32,726 --> 00:02:38,876
My branch has a really good
engineering staff, okay,

42
00:02:38,876 --> 00:02:42,996
and they have fun with their
assigned projects right now.

43
00:02:43,316 --> 00:02:46,816

Can you explain a little
bit to me how this works?

44
00:02:48,056 --> 00:02:49,876
>> It shows that it might
collide into an airliner,

45
00:02:49,876 --> 00:02:52,116
as you see as soon as they speed

46
00:02:52,116 --> 00:02:54,796
up it avoided the
collision with the airliner.

47
00:02:55,246 --> 00:02:55,556
>> Okay.

48
00:02:56,136 --> 00:02:58,886
>> And so it's just
a traffic alert.

49
00:02:59,376 --> 00:03:01,376
[Mechanical sounds]

50
00:03:01,736 --> 00:03:03,926
>> And then we also we
currently support Traveler.

51
00:03:05,206 --> 00:03:11,386
The Traveler is a
project that uses the UAV,

52
00:03:11,386 --> 00:03:16,996
the unmanned air vehicle,
to do the demonstration

53
00:03:17,456 --> 00:03:22,076
or help the FAA actually
figure out the way

54
00:03:22,556 --> 00:03:28,846
to certify the safety
feature of flying the UAV,

55
00:03:28,846 --> 00:03:33,726
you know in maybe in
our national airspace.

56
00:03:34,086 --> 00:03:36,086
[Mechanical sounds]

57
00:03:36,156 --> 00:03:40,296
We're working on, they call it
Schlieren imaging technique.

58
00:03:41,101 --> 00:03:43,101
[Radio voice]

59
00:03:43,186 --> 00:03:47,276
That is the fly that they use
the sun as a background in order

60
00:03:47,276 --> 00:03:50,476
to detect the picture
of an airplane and try

61
00:03:50,476 --> 00:03:56,726
to see the wave, the sonic boom
clearly against the sun's image,

62
00:03:56,726 --> 00:03:58,576
they call it the
Schlieren's image.

63
00:04:00,136 --> 00:04:05,576
We have many other projects
that we are enjoying right now.

64
00:04:06,516 --> 00:04:10,546

Here we have two airplanes

65
00:04:11,046 --> 00:04:15,836
So right now I'm in it, in
NASA, you know work for NASA,

66
00:04:15,836 --> 00:04:16,836
it's my dream come true.

67
00:04:18,696 --> 00:04:24,726
I enjoy doing my job a lot here
and I'm glad that I be able