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00:00:14,050 --> 00:00:18,840

My name is Sameer Kulkarni. I'm an aerospace engineer and I work as a researcher in the

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00:00:18,840 --> 00:00:25,240

Turbomachinery and Turboelectric Systems Branch at NASA Glenn Research Center. I work in turbomachinery

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00:00:25,240 --> 00:00:30,890

aerodynamics research. Turbomachinery is the rotating parts of gas turbine engines. Those

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00:00:30,890 --> 00:00:35,680

are the engines you see flying on most airplanes today and my research is focused on the compressor

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00:00:35,680 --> 00:00:38,730

section, which is the front part of the engine before the combustor.

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00:00:38,730 --> 00:00:43,560

Currently I'm supporting the Highly Loaded Front block Core Compressor Test Program.

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00:00:43,560 --> 00:00:47,700

This is a test that is being done in conjunction with General Electric which is our partner,

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00:00:47,700 --> 00:00:52,510

and is being funded under the ERA Project, which is the Environmentally Responsible Aviation

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00:00:52,510 --> 00:00:56,870

Project. We're trying to demonstrate up to a 2 ½ percent reduction in fuel burn by

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increasing the compressor's pressure ratio. I think an inclusive and diverse team is important

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00:01:01,430 --> 00:01:05,870  
to have, especially for the work we do at  
NASA, which is inherently pretty complex and

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00:01:05,870 --> 00:01:11,040  
requires collaboration across a lot of different  
disciplines. A very diverse team will give

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00:01:11,040 --> 00:01:16,120  
you a lot of different perspective to tackle  
any big problems that may come up. So that's

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00:01:16,120 --> 00:01:18,360  
important to have for the work we do.

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00:01:18,360 --> 00:01:22,640  
I was born in India and my family immigrated  
here when I was quite young. But that still

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00:01:22,640 --> 00:01:27,580  
gave me the chance to experience two cultures,  
both American and Indian. And I think this

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00:01:27,580 --> 00:01:32,930  
month really means sharing that Indian culture  
with other people that may not have the opportunity

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00:01:32,930 --> 00:01:36,360  
to experience it every day, and also to learn  
about all the other Asian cultures that are

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00:01:36,360 --> 00:01:37,370  
out there.

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00:01:37,370 --> 00:01:42,180  
I think food is the best way to really dive  
into a culture. So I think that passing on

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00:01:42,180 --> 00:01:46,780

those traditional recipes is very important for the younger generation. There's nothing

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00:01:46,780 --> 00:01:52,470  
like sitting around a table and sharing a meal, and you really get to learn the different

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00:01:52,470 --> 00:01:58,400  
ingredients that might be geographically available, the way the food is prepared, and the way

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00:01:58,400 --> 00:02:01,970  
the food is eaten, or the formality around the dining room table really gives you insight

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00:02:01,970 --> 00:02:06,910  
into that culture. My family, honestly, isn't too big on tradition, but the one thing I

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00:02:06,910 --> 00:02:11,250  
look forward to is whenever I go over to my mother's house, she's an excellent cook,

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00:02:11,250 --> 00:02:15,530  
so sitting down for that home-cooked Indian meal, there's nothing better than that.

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00:02:15,530 --> 00:02:20,630  
I was born in the Mumbai area of India, but when we moved to the United States, we moved

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00:02:20,630 --> 00:02:25,100  
right to Solon, Ohio, which is actually a suburb of Cleveland. I ended up going to school

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00:02:25,100 --> 00:02:28,690  
at Case Western Reserve University, which is on the east side of Cleveland, so at this

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00:02:28,690 --> 00:02:33,260

point I'm pretty much a Clevelander I think.  
My parents taught my sister and I to value

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00:02:33,260 --> 00:02:37,530

education and to strive for higher education,  
but also just to work hard and treat people

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00:02:37,530 --> 00:02:38,530

well.