



US-ELTP Career Profile

Divya Thanasekaran

Giant Magellan Telescope Real-Time Software Engineer



When you are struggling, don't surrender, things can only go uphill."

One of Divya Thanasekaran's earliest memories growing up in Mumbai was watching the first female astronaut of Indian origin, Kalpana Chawla, return to Earth from the Space Shuttle *Columbia*. As a child, Divya was inspired by space and the natural world, which led her to pursue a future in science rather than arts or commerce, a decision all Indian students face around the age of 15. Divya was awarded an academic scholarship to attend high school at the Global International School of Singapore. While she took advantage of this opportunity to pursue an education at a world-renowned, internationally recognized school, she ended up dreading her courses in programming. Divya began to feel she was the only student in the class for whom coding did not come easily. But through hard work and practice, she slowly became better at programming. When Divya went back to India, she continued her path in engineering.

Divya attended New York University (NYU) for graduate school and gained valuable experience from a variety

of engineering projects. At NYU, she assisted with engineering and machines for MakerSpace, a cutting-edge lab that fosters innovative projects and designs and tests prototypes for a variety of projects. This diverse experience helped Divya land her position as the real-time software engineer for the Giant Magellan Telescope.

What did you enjoy most about your position at the Giant Magellan Telescope?

I applied for this position because not only did it look super cool but it also fit my profile perfectly. I was a little unsure if I would get the job without a background in astronomy. But ultimately, the telescope is really a machine that engineers build taking into account astronomy and science. I have always enjoyed working with hardware and making things move. But developing something on this scale is so unique and exhilarating.

Another wonderful thing about my role is I get to work with people from various backgrounds and countries. It is really motivating to be around a diversity of people and to learn about their cultures. My colleagues are my greatest motivators and they are now my friends.

Fun Facts



I used to play chess at a professional level in school and a national level in India. It was cool to have something on the side besides study, study, study.



As a student, I tried to enroll and participate in any opportunity or festival. I was in charge of leading the cultural festival at my college.



Being in NY and LA I have been able to try foods from all around the world. My soul food is still Indian food like biryani (mixed rice dish).



I enjoy traveling. I was able to tour countries like Spain and Italy because I knew people from the Giant Magellan Telescope. This opened up doors that I didn't know existed.

What were some challenges you faced?

I struggled as an undergraduate and graduate student because it was hard to visualize what my future would look like. It was demotivating to feel uncertain. There were many times when I wondered if I wanted to be doing something else. The bottom line was that whatever I decided to do had to be something I approached with passion. This project, working for the Giant Magellan Telescope, excited me because it automatically came with passion.

What advice do you have for students?

My advice for students who may be struggling to succeed in something they are interested in is to not give up. Keep trying because things can only go uphill from there. Specifically, programming is an acquired taste. If this is an interest, students should try to explore things that move, like microcontrollers. Focus on the satisfaction and reward of seeing things move or light up based on your commands.

Divya's Pathway to Telescope Real-Time Software Engineer



Grew up in Mumbai, India



Inspired by the first female of Indian origin to go to space



Chose to pursue a science pathway for high school



Won a scholarship to attend a leading international school in Singapore



Persevered with programming despite obstacles



Worked for the Giant Magellan Telescope from 2018 to 2022



Assisted with engineering and machines for NYU's MakerSpace



Attended NYU for graduate school