

Rover Undergrad

Hi I'm Lucy Abramyam. I'm a software engineer at NASA's Jet Propulsion Laboratory.

I started working at JPL in 2003 and this was around the time where the Mars Exploration Rovers were launching.

So it was in summer and the atmosphere at JPL was amazing. For a high school intern was who is 16 years old, this was the most exciting place to be.

The team that I was on my first year was working on writing operations planning software for the Mars Exploration Rovers so as a high school student I actually got a chance to write code, help with the testing and help scientists with the preparation for actually being on Mars

TEXT ON SCREEN

As a high school junior and senior, Abramyam interned in the JPL Summer High School Internship Program.

During college she interned at JPL in two more programs: NASA Space Grant and Caltech's Summer Undergraduate Research Fellowship.

So I was getting so much out of the internships, they encourage what a scientist has to go through. They tell you that you have to write a proposal, you have to go through the same steps of writing a final report and documenting your progress

And five years later, these scientists are still excited about being a part of history.

TEXT ON SCREEN

After college, Abramyam came to work at JPL as a software engineer for ATHLETE, a robot that may one day assist astronauts on the moon.

ATHLETE is the All-Terrain Hex-Limbed Extraterrestrial Explorer.

ATHLETE has a six-sided frame which means it has six different faces. Each face has a stereo pair of cameras which act like eyes, human eyes and it can return images that can be in 3D.

The rover has six legs and each leg has six degrees of freedom. The special thing about this is that not only can we drive on wheels but we can use the legs to walk around over large rocks or on terrain that we couldn't necessarily drive over.

Now I'm looking at ways to allow operators to enter an immersive environment where they can see and almost feel what ATHLETE is feeling when they're in this environment.

And this involves a lot of research and a lot of different fields of computer science.

When I tell my friends about what I do, they are amazed, they can't believe it. They all unanimously agree that I have the best job in the world.

TEXT ON SCREEN

Apply online for the 2009 JPL Summer High School Internship Program at

jplspaceship.jpl.nasa.gov

Deadline March 13, 2009

For more information about all internships at JPL:

education.jpl.nasa.gov