

# "Building a world of the future for everyone"

→ **VINITA MARWAHA MADILL** is Founder of Rocket Women and a Project Manager at Mission Control Space Services, Canada

## What is a typical day for you?

I usually meet virtually with international colleagues to develop innovative space exploration and robotics projects, as well as colleagues closer to home to create exciting space outreach activities. Plus, I collaborate with colleagues in-person on the development of a user display that will allow control of an AI-enabled rover on the Moon's surface. In the evenings and weekends, I devote my time to Rocket Women, a platform I founded to inspire the next generation of young women to choose a career in STEM.

## What interesting projects have you worked on?

Designing prototypes of the SkinSuit spacesuit whilst at the European Space Agency was amazing and seeing it being used on the International Space Station is the ultimate reward. It is worn inside the spacecraft and provides loading onto the astronaut's body to recreate the effect of gravity upon their skeleton, helping to preserve bone mass and improve spinal health.

Additionally, in my current role we are developing AI algorithms to classify the Moon's surface terrain, essentially making lunar rovers smarter and helping to reduce the workload of scientists on the ground. This cutting-edge, semi-autonomous technology should be able to identify geological features on the Moon from camera images and may even inform astronauts on a spacewalk in real time to select features of scientific interest to sample.



The full version  
of this interview  
is available at  
[geoscientist.online](http://geoscientist.online)

## What advice would you give to someone hoping to work in your field?

It takes hard work and dedication to achieve your goals, but it is worth it. I learned about Students for the Exploration and Development of Space, through which I met space professionals for the first time. I also completed the nine-week Space Studies Program at the International Space University, which is a life-changing experience that I highly recommend pursuing, with daily lectures given by astronauts and space industry experts. Almost everyone I know working in the space industry and otherwise has felt like their future career was unknown at times, but pursuing your passion and persevering is important, whether you're able to do that in your main job or even as a side hustle or volunteering role.

## Tell us about Rocket Women.

Growing up and throughout my career, I didn't see anyone that looked like me in the space industry and I believe that representation really matters. Our goal at Rocket Women is to envision, design and build a world of the future for everyone. We are doing this by empowering young women globally to consider a career in STEM and supporting them throughout this career journey.

With our online platform and new podcast releasing next year, we are sharing the stories of incredible, diverse women in science and engineering to inspire the next generation, alongside helping to send a young woman to the International Space University through our scholarship program. We want to give every girl the chance to reach their potential and change the world through STEM. 