

Why I Want to be a Geologist

We're headed out there. We always have been. Out over the next horizon, out over the sea, out of the atmosphere and to the moon. Now the next out there is really out there, out of Earth's orbit. I read an article today about a new fuel-less propulsion technology being developed that could make solar system exploration economically feasible. It's happening. Within my lifetime, I'm confident some brave soul will step foot on Mars.

But I feel that in order for humanity to spread to other planetary bodies, we must have the best available knowledge of every aspect of the worlds we visit BEFORE we visit them. The local, regional, and indeed planetary geology of a planet is probably the most important area of knowledge for an astronaut stepping foot on another planet. NASA has plans to send humans to Mars in the next few decades and I want to be a part of the important research into the surface features of Mars so that these future astronauts know exactly what to expect when they step foot on Mars. But this knowledge is not valuable just for extraterrestrial exploration, but also to give geologists a perspective on Earth systems we have never had before. The morphologies and terrains studied on another planet such as Mars could give us new insights on the structures of the Earth itself.

Participating in this type of research would fulfill a lifelong dream of mine, to have a job studying astronomical objects. My favorite aspect of astronomy was always planets. The possibilities of extraterrestrial life, the extreme surface conditions on Venus, the great variety of Jupiter's and Saturn's moons; these were the things I always loved to learn about. I think that sending humans to these distant shores will only refocus people here on how precious our perfect planet is, and how important it is that we respect and protect our planet so that it doesn't become a hostile environment like the one those first explorers will have to face, out there.