

Essay:

Ever since I was a child, I was fascinated with dinosaurs, rocks, planets, the universe, and digging holes. At age 7, I learned the Latin names of dinosaurs, my parents read astronomy books to me and I was busy getting my clothes dirty while digging through sand on the beach or the soil in my backyard. My interest in the natural world was broad and I decided to become an astronaut. The curiosity and fascination never ceased, but over the years it became clear that being an astronaut is not the regular 8-5 job that the 7 year old me imagined.

After graduating high school, I was at the point where I seriously started to outline where I wanted my career to go. Essentially, I looked up all university majors that were offered and asked myself the following three questions: 1. What are my interests? At this point languages and archeology in addition to natural sciences. 2. Where/what are my strengths? Natural sciences and languages. 3. What career path offers exciting job opportunities and could I see myself taking this path and still be happy with it in 30 years? This one clearly went to the natural sciences. Looking at the specific class descriptions and job examples, it became obvious very fast that geology was the way to go for me.

I was always fascinated by the idea of integrating and recombining multidisciplinary knowledge in a way no one did before, tackling issues from a new perspective to come up with a solution to scientific questions. Now, I am finally in a position to do exactly this. I am a fourth-year PhD student at Texas A&M University, working in the intersection of classic field-based carbonate sedimentology, well log interpretation and 3D seismic interpretation.

The term geologist is really not a specific job description in the light of our education. In my view, geologists are the Swiss army knife of science - with a background in mathematics, physics, chemistry, engineering, outdoor skills and a four-dimensional (3D space plus time) approach to deciphering the rock record. Geologists are the crime scene investigators of our planet, looking at subtle clues of past events, applying a multitude of analytical methods and an understanding of processes and their expression in the rock record to deduce what happened millions or billions of years ago.

With the interdisciplinary nature of geology comes the need and responsibility to communicate clearly, not only to peers, but also to experts from other sciences and non-scientists. My undergrad sed/strat professor really understood how to teach in a way that is exciting and informative, in a way that even complex concepts could be understood by a non-expert. And while this skill may sound trivial to some, its implications cannot be underestimated. It was this particular professor who inspired me to do an internship as a mudlogger in Texas (by the time I did my undergrad in Germany). Now I am working on my dissertation with focus on the effect of tectonics, climate and sea level variations on the evolution of carbonate clinofom systems throughout the Phanerozoic.

This just shows how clear communication and incredible teaching skills formed my dream of leaving Europe to pursue my dream of getting a PhD and work experience in the US. In the bigger picture, this skill can (and should) be applied to communicate science within the scientific community and to the general public. Geologists are in a position of huge societal, economic, environmental and geopolitical responsibility. If we don't communicate clearly, we are doing society a disservice.

I want to be a geologist because I want to keep exploring, learn new things, be on the cutting edge of science and technology, work with amazing data and communicate this fascination to

other people. I want to inspire the next generation of geoscientists. And maybe (eventually) to fulfill my dream of being in space. Because, as it turns out, there was only one single person to walk the moon who was not an airforce pilot. It was geologist Harrison Schmitt with Apollo 17 in 1972 who walked the moon and did what every geologist would have loved to do. He threw his rock hammer on the moon.