Describe your overall duties/ responsibilities as a RF Systems Engineer:

As an RF Systems Engineer, I work with other engineers and contractors to develop communication links between satellites and spacecraft for the Department of Defense, NASA, and others. This requires knowing all the parts that go into designing a RF system, and pulling them together to get a working system. Eventually, I will be a responsible engineer for projects, which means I will be the lead engineer in charge of pulling the system together with a team.

Explain the skills/abilities that are required for being successful in your role:

Good communication is a skill that is critical to working in this sort of role, since there is a lot communicated between other engineers, customers, suppliers, etc. It also is important to have a good knowledge of all the parts and pieces that fit into the system even though I am not directly designing the individual components. At the end of the day, I will be responsible for a working system that is impossible to fix once the spacecraft launches, so it is important to use sound design, have clear specifications, seek advice from mentors, and get plenty of tests!

What advice would you give to students who are considering majoring in Electrical and Computer Engineering?

Spend time thinking about what you like and can do on an everyday basis. Engineering is a very broad field where day to day tasks can vary greatly between jobs, but they all rely on the math and science background. Take some time to talk with family and friends that are engineers to see what their career is like. Engineering is very rewarding, but you have to put the work in, so make sure it will land you in a career you want. That can be hard to tell though, so don’t get too caught up in not knowing your interests. College is really developmental. Following your passion will make you happy at the end of the day and is more important than ending up in any particular career. Just be flexible!