

Scott Bruce

## Field Report

Hey Mom, Dad just wanted to talk to you two about the different fields I have been exploring and what they are. First and foremost is computer science which is the backbone to everything and contains everything in the field from algorithms and data structures to program languages. Basically, it is involved in some way to everything in computing because all the other fields feed off it. For example, software engineers use mainly programmer languages to create products and programs. Information storage fields use data structures to help store data effectively. As previously mentioned software engineering uses programmer languages such as Java, Python, and JavaScript to code all sorts of programs and applications. Everything from simple storage apps for photos, to music players, to complete video games. Then they sell these products or add a premium membership to charge money every so often. This field is very intriguing because it has a lot of potential for passive income if you're a good programmer and makes something big. Think of Spotify or Facebook or Amazon all massive companies that make money and the owner doesn't have to do much. Lastly, Information Technology which is closely related to software engineering does mainly programming jobs but also can work with the physical parts of the computer the hardware. Although this field mainly focuses on maintenance and keeping everything working. If you have an update for an app for bug fixes there is a good chance a few information technology techs worked or did he patchwork.

However, there a few other fields I am interested in pursuing as a career. Firstly, something you might know a little about Dad is cybersecurity, which is basically security used to protect a program from cyber-attacks mainly hackings. This works by protecting access points at data centers and from the user's end. For example, Facebook, although having got into trouble for security a few months ago, has security at the database to protect accounts. Some companies need to be more cautious if they have debit and credit card numbers. Another intriguing field would be a Database administrator which does the same thing as an information technology tech but focuses on database maintenance and upkeep. However, they do some cybersecurity and make sure the database is free from hackers. Lastly, the third main field I'm interested in is probably the one I am interested in the most would be Hardware engineering which as you might guess engineers' hardware for computers. Everything you see in the computer is designed implemented and tested by a hardware engineer, simple parts like fans and more complex parts such as a CPU. The reason I want to do this the most is because I really building things and it looks like it would be fun to just build and test parts I've built.

Hopefully you guys have some more insight of what I've been thinking about doing,

Scotty