

## Fields Report

There are some differences and things in common with computer science, software engineering and information technology. Computer science is the science that deals with the theory and the study of digital computers. Computer science is the study of finding solutions to problems and how to find those solutions better and faster. To find better solutions and solutions faster, computer science focusses on computer programming research, research in artificial intelligence, and other research to help improve programs we have today. Software engineering derives from computer science in that it uses coding languages and other research found from computer science to build projects that include designing of hardware and software, app development, web development, and smartphone and mobile development. Information technology is working in the computer science field but is quite different from software engineering where an information technology person works with information security, network architecture, database administration or computer installation just to give some examples.

Some fields in the computer science space are computer security (cyber security), bioinformatics, and computer graphics. Computer security is the act of preventing viruses, malware, working with firewalls, access control and intrusion detection. People in computer security can work with large companies to help keep their information safe from potential threats. The government also needs its security of information from the world. Bioinformatics work with software that is used to further understand biological data or organism's DNA,

RNA, and protein fibers and so on. This computer science field relies heavily on biology which is good for anyone that loves software and biology. Computer graphics is the use of software to create special effects in movies, videos, and even video games. This field relies heavily on mathematical knowledge and physics to make sure special effects look realistic.

The field I am most interested in is software developer or software engineer. I am most interested in this topic because I want to learn more in making applications that could help people in many ways, even though there are a ton of applications out there I would still enjoy making my own applications trying to make them better than what is currently out there. I personally enjoy helping people and if I can be a part of a team that comes up with an application that could help people lose weight and keep it off, or help people learn a language, or help people become more productive, or help a company become more profitable, no matter what it is, I enjoy just thinking making a project come to life from nothing with the help of a team.

The way I wrote this report was by first doing my research on the topics of computer science, software engineering, and information technology. This was a little harder since I really wanted to have a good understanding of the three and learn more on what differentiates the three. I then compared the three and wrote down notes on the side, I used the notes or key points I wrote down to make sure I didn't miss anything important. I then thought about how I would piece every paragraph together and I made a small outline that saved me some time and saved me having to go back to my notes and back to the articles and YouTube videos I used to get all the information.