

Throughout this essay I will be explaining the knowledge about computer science, software engineering and information technology. I will be going in depth on fields of computer science and how it is applied throughout those fields. Another part of this essay will be to identify the field of computer science that I am interested the most in and how I will use it in a different field of interest.

Information Technology Is the first career I will be discussing. Information Technology is the use of computers, storage, infrastructure and networking to develop, create, operate, store, protect, and disperse data. IT employs nearly 6 million people from industries, healthcare, education and finance. Some hardware technology that could be included would be physical devices like, a laptop or a tablet. While on the other hand software could contain the operating system and special programs on these devices to perform certain tasks. Today the common trend for Information Technology is Cloud computing, and it, lowers IT cost of the company, influences the use of virtualization, and allows servers and storage to be accessed transversely through the organization. This is the basic knowledge of why Information Technology is necessary in any business or organization.

Next, I will discuss Software Engineering. Software controls a clear majority of devices from a laptop, smartphone or laundry machine. Merriam-Webster said, "Software means a branch of computer science that deals with the design, implementation, and maintenance of complex computer programs." Software engineering originated in the end of the 1960's where it was used as a new type of engineering level concerned with all of the pieces pertaining to software production. Software engineers connect the

construction and maintain the company's system of computers that they use every day. They will also organize the company's computer needs like ordering, billing, inventory, and check for necessary devices or applications. Along with everything else software engineers do they also install complete computer systems. Finally, one of their major jobs is to guarantee an appropriate level of security along the whole system they are responsible to work on.

The final topic is computer science. People will say that computer science has nothing to do with science, all though this may be true it does involve dedication and many different theories, mathematics and engineering. Computer science in my own words is know as a "discipline that contains the comprehension and design of computers and how everything in computers runs." Computer science consists of many fields, but I am going to talk about Hardware, Networking, and Artificial Intelligence. Hardware packs with constructing the computer chips and circuit boards. This is also operated on in chip architecture but further in electrical engineering style project. Next, Networking stretches the topic of device interconnection, which is closely connected to an additional topic system. This covers a different amount of work in algorithms, for peer to peer networks to allow data searches and prevent damaging networks from load balancing stopping network nodes from hurting the system. Finally, AI works to contain a lot from machine learning to planning for solutions. AI is used for games such as chess on your computer to controlling drones and used to solve problems in spacecrafts or medicines. AI is also related in robotics, it works on improving the use of a robot's agents and abilities this all leads back to computer science by connecting theses fields back to its meaning.

In the end IT, Software engineering and computer science is used every day in all sorts of different ways, through companies, industries, education, even medical fields. As the industry continues to grow for these field, we will need millions of more people to learn and understand how it works. Hope you like it.

