Fields Report

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I am a software engineering major at Florida Gulf Coast University, this leads me to a career of using my skills I earn through school to create, service, and develop software for many different reasons. As a software engineer I will use engineering tactics and ideas to further help in developing the software I will be working on. My task is to help build and maintain great user-friendly software with often a full team of other engineers, where as a computer science major is more likely to use complex algorithms to solve problems within data and streamline processes. computer science also has an aspect to how computer systems are designed embedded in the degree, but they are very focused on the theory behind the processes of a computer. The field of computer science also takes the work of software engineers and integrates the code so it will run smoothly on a computer. Those in the software engineering field will often take more general engineering courses based on problem solving, whereas computer science engineers will take classes around theory of computers. These two fields differ from that of information technology because people in the field of information technology will more likely interact with clients and business owners to solve technological problems. Often these clients are outside of their department when those in the field of computer science and software engineering will often work with others in a similar field or department.

Computer science is used in many different fields, 3 of these fields are software development, computer programming, and information security analysis. Computer science is crucial within software development because the skills learned through computer science are needed to develop software. These skills include coding, identifying a need, as well as adapting

the software to run correctly. Without these skills a software developer would struggle to build any software at all, as their job is to build software using code to fulfill a need or complete specific tasks.

The field of computer programming is about making the software that developers build usable on computers. A pivotal part of this field is using the programming language learned in computer science to turn the software into code the computer can use and run. Without the work computer programmers do, software would never be able to be run. The tasks of a computer programmer include analysis and generating algorithms. All their skills are used to help build the program the computer can run to complete it's task. All the skills needed for computer programming are developed through computer science, as it gives the foundation for the coding, and problem solving needed in this field.

Information security analysis is a field focused on protecting an organization's computer network and systems. This field is largely based around preventative measures, to avoid a cyber-attacks. Computer science is a huge part of this field because the principles of problem solving, and using algorithms are needed to protect company's systems. Also the knowledge of computer systems is a necessity for this field which is developed through computer science.

I would prefer to have a career in software development because I enjoy working with a team to develop something new and great. The thought of having a project and making something new or extraordinary has always interested me. I enjoy the problem solving and coding needed for this career. I also enjoy the engineering aspects that can be used through software development, and the systematic approach that can be taken.