Fields Report

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Computer science is the study of the use of computers and principles and applies them to both physical things and abstract ideas. Computer science is a very broad topic since it includes both fields of software and hardware of computers and teaches both about the physical aspects of computers, such as the parts to a computer, and the nonphysical aspects of a computer, like the programs run by a computer. Software engineering is different than computer science in the sense that software engineering is more about engineering or creating programs and codes that are used in computers. While you are creating software for multiple reasons and purposes, it is still less broad than computer science. Software engineering is more specific than computer science because under the field you would not focus as much on the physical aspects of a computer like you would in computer science.

The third topic is information technology and it covers mainly the storage and transfer of data and information. In the field of information technology, you would be creating programs to protect data from being stolen, and create programs to transfer data from one place to another. You would see this field mostly in securities and businesses to protect the data that those businesses have.

Three fields of computer science would be programming language theory, artificial intelligence, and computer graphics and visualization. The field of programming language theory is about the differences of all the computer languages that there are. This field covers the creation, application, and classification of computer languages. Programming language is very important because it is used in all fields of computer science and many other fields that involve computers. The field of artificial intelligence is the creation of programs and systems to process information by the computers self. The field of artificial intelligence is involved with many other fields of science that do not fall under the categories of computer science. You would take information from other fields such as neurophysiology, social intelligence, and other fields that cover how the mind works since artificial intelligence is creating a program that can “think for itself” and be self-sufficient in a sense. The third field is computer graphics and visualization, which is a computer science field that works together with the arts to create and manipulate image data and such. When people think of this field you will think of the special effect in movies and the computer-generated graphics in video games. It combines aspects of mathematics with aspects of art and visualization to create these images.

A field of computer science that I am interested in would be the field of software engineering and development. I find it very interesting the idea of creating programs that would be used in computers and by businesses on a regular basis and I find that programming is very interesting and fun so I want to have a career in the field.