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Fields Report

Today, everywhere we go, we see the use of computers in our lives. Computers are evolving more and more everyday as we progress into the future. For these advances to occur, fields dealing with all aspects of a computer have become very common. Computer Science allows people to understand computers and how they work, Information Technology (IT) allows people to work with the development, maintenance and use of computers, and Software Engineering allows people to apply the basics of engineering to software development so the improvement of computers can progress at a steady pace.

One field that is important when dealing with computers is computer science. Computer Science is the study of understanding and design of computers and computational systems. It requires one to think in abstract terms and concrete terms. Computer scientists deal mostly with software and software systems; which comprises of concept (theory), design (model), development (production), and application.

Computer Science can be applied to many fields of work around the world. Here are some key fields in which computer scientists would study in are artificial intelligence, bioinformatics, and programming languages. Artificial Intelligence (AI) is the make-up of humanesque behavior, mind and actions. Implementing computer science serves the goal of creating computers that can perform tasks that only people could previously accomplish. Computer programming languages are an important part of computer science. The languages are used to create form and function to everything we used that is electronic including smartphones, all electronics and websites. Bioinformatics is a new and rapidly growing field that has emerged from the fields of experimental molecular biology and biochemistry, and from the artificial intelligence, database, and algorithms disciplines of computer science. Computer Science is a basis for the new field of bioinformatics.

Another field that is important when we come across having a big computer system we have is information technology. Information Technology (IT) is the technology involving the development, maintenance, and use of computer systems, software, and networks for the processing and distribution of data. When IT was first introduced in 1958, an article was released in Harvard Business Review and it stated that IT was comprised of three basic parts: computational data processing, decision support, and business software. Nowadays, most companies will have an IT department that will manage the company's computers and software within them. Their responsibilities deal with the areas like computer tech support, business computer network and database, administration, business software deployment, and information security.

Also, software engineering is another field that is important when dealing with computers. The software engineering field applies the disciplined, structured approach to programming that is used in engineering to software development with the goal of improving the quality, time and budget efficiency, along with the assurance of structured testing and engineer certification.

One field of computer science that interests me the most would have to be artificial intelligence. I find it very interesting that we are developing software that can act like a human and interact with a human. Also, I find it interesting and terrifying at the same time that AI can learn by themselves. They do so by trial and error and by visualizations. I think it's insane how far technology has come along and it is only the beginning.