Cristian Mendoza

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Fields Report

To describe three fields within the realm of computer science, it would pay to at least explain what computer science and its related topics are. Computer science is the study of computers and computational systems. This includes systems such as computer servers, databases, personal and commercial computing and much more. Information technology is the study or use of systems for storing, retrieving, and sending information. Things such as managing databases, downloading music and even sending an e-mail are all part of information technology. Finally, software engineering is the systematic application of engineering to the development of software.

Programming languages as a field in computer science primarily involves studying, testing, analyzing and optimizing programming languages. Optimization can include making improvements to existing programming languages and or ensuring new programming languages are usable. Creating a programming language altogether also relates to the field of programming languages. Other fields of computer science very much depend on the work done in this field as well as almost all computer systems and programs made today depend on optimized programming languages.

One field in particular that depends on the work done in the field of programming languages and recently referenced in this paper is software engineering. Software engineering deals with the designing and implementation of software. Designing software can involve just

imagining a conceptual website to actively maintaining an existing program to be free of software glitches that prevent the user from using the program as it was designed to be. However, on the topic of managing software, it can be an absolute pain to repair and let alone manage a program. As programs grow larger in size, the needs of managing them grow as well. In this case, maintaining them through growing engineering teams makes sure that the program in question is well optimized.

The field of computer hardware is within the focus of design, engineering and mainly deals with circuits and computer chips. Electrical engineering practices are commonly taken into account with general electrical engineering style circuit design being a big example. Without the field of computer hardware within computer science, there wouldn't be the field of programming languages and without the field of programming languages, the field of software engineering could not exist.

Personally, I'm the most interested in the field of game development. To create an idea from your mind such as an experience or a dream you've had before into a program that everyone can use to witness your idea is invigorating to me. Even if no one has the time of day to scroll through the endless list of games and interactive programs on the internet to play my game or use my program, it wouldn't matter in the end as I would have done it anyway for myself just to see my ideas and dreams come to life on a screen.