Fields Report

Despite technology's immense growth and impact on society in recent years, many people are still unfamiliar with the different components which make up this diverse field of science. Technology in itself is applied science made up of different fields which all contribute to technology's application or advancement. In particular, there are three areas of study which are heavily involved with technology: computer science, software engineering, and information technology. Computer science is the study of computers and their systems. This involves dealing mostly with software and software systems, which includes their theory, design, development, and application. Software engineering is basically the application of engineering principles to software development. This usually involves analyzing user needs, and then designing or testing different applications which will satisfy those needs through the use of software programming. Information technology involves the study, development, implementation, and support or management of computer-based information systems. Its focus is heavily centered around the use of systems for storing, retrieving, and sending information.

After reviewing these different areas of study, one can see how they differ yet remain interconnected. It's also important to recognize that there are various subfields which fall beneath each area of study. Computer science, in particular, is an area of study which has a number of different subfields. But for our sake, we'll just focus on three: graphics, networking, and hardware. The field of graphics involves the study of methods for digitally synthesizing and manipulating digital content. It includes work in animation, 3D graphics, and data visualization. Networking, which is closely related to systems, studies device interconnection. It can deal with anything from devising a home network to linking different installations together across the country. Computer hardware deals with the actual manufacturing of circuits and chips, which

allow systems to function. These fields are all related to computer science because they all involve some type of understanding or study of computers and computational systems. Even though it may be to differing degrees, it is still clear that each of these fields applies computer science.

The field of computer science which interests me the most is software engineering. This field has the capacity of producing a number of opportunities that are unlike any other. I would prefer to have a career in software development because I enjoy working with a team to develop something new together. The thought of having a project and making something 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 as I enjoy brainstorming to solve problems.