## Fields Report Colin Mason

Three huge fields in this rising information age, and in my own life, are computer science, software engineering, and information technology. In today's world, society is practically run by computers, so these three fields are very ideal and important fields to go into. But what are the differences between these fields? Some might say that these three topics are the same thing, but that cannot be farther from the truth. Computer science, software engineering, and information technology are three very different fields with very different career opportunities, but at the same time are beautifully intertwined to the point where one's career can be very flexible in between the fields.

## The Three Fields Defined

Computer science, in a nutshell, is a basic study about how computers work. It is a study about the logic and the math behind computers, and how it can be streamlined to be faster. You work with plenty of algorithms, and do plentiful amounts of coding. Some careers in this field can be narrowed down to being a computer programmer, a web developer, and even a software engineer. As said before, the beauty of the technological scene is that one can easily be flexible with their own career. Three fields pertaining to computer science are hardware, theory, and graphics. Hardware is the basic physical features of a computer, and how algorithms and logic can decrease the general size of computer parts while streamlining their efficiency. Theory is the basic logic of any computer. It is often very mathematical and is a field in where people try to push computing to its absolute limit. Graphics is the field of designing visual scenes and games using a cleverly constructed code of 1s and 0s. This is probably the field I am most interested in. I plan on creating a video game at some point, not as job just yet but more as a hobby, in the hopes of leaving my mark on the gaming industry.

Software engineering, as opposed to computer science, is a more hands-on approach to computers. It is the study of how systems are built and constructed, and not as focused on the overall logic of software systems. It typically is less about algorithms, and more about efficiency. Again, these skills can also go hand in hand. Some careers in this specific field can be a software engineer, software quality assurance, and software database administrator. The ability for all of these fields to work together in tandem with one another is rarely seen in business, which is personally why I chose the technology field.

Information technology is less focused on how computers work, and more focused on the best uses for computers, mainly storing information. Some careers in this field include most IT careers, web developers, and app developers.

## Report Report

Putting this report together to me was relatively easy. I started by mainly using the links you provided on the assignment page. Organization was also simple to me: I decided before I started to write that I would create a rough outline on paper, and that is exactly what I did. I

decided to sketch it on a simple sheet of notebook paper, where I divided the report into two simple sections: the introduction, and then the body, which defined the three fields we were asked to define. This section had one subsection, which was in the definition of computer science, where I defined three subfields within that field, and which one was the most interesting to me. Once I had the organization well-thought out, I decided to start looking at information. I used the search tools we were shown in class, and the most useful websites I found were typically the websites that compared software engineering directly to computer science, and information technology. I tried to hammer in the idea that these fields are flexible in the essay, because that is truly the beauty of a career in any technological field. I then transcribed that information into entirely my own words, and applied it to my life. This essay was written with the general idea of my audience being my family members, or friends that do not know the difference between these fields. I think the essay turned out pretty well.