

Macie Ryan

COP 1500

Professor Vanselow

24 March 2018

Fields Report

The job description of a computer scientist is to conduct research to develop new computer technologies in order to solve problems in a variety of fields. Software engineering is defined as “the development and building of computer systems software and applications software” (“Fields of CS”). Information technology is defined as “the study or use of computer and telecommunication systems for storing, retrieving, and sending information” (*The American Heritage Science Dictionary*). Though these jobs are similar, there are vast differences within the world of computers and each requires vast specified training.

Software development is the largest field of computer science. Computer science is applied in software development careers in that those workers must use their knowledge, understanding, and problem-solving skills of computers and programming to develop or enhance programs, websites, applications, and more.

Systems analysis is another large field of computer science careers. This field consists of building programs that contain a lot of resources with building operating systems, databases, and distributed computing. Workers within the systems analysis positions are tasked with learning the ropes of one (or more) programs, then develop ways to enhance the program and make it work more efficiently and effectively. This field is directly related to computer science, because workers are required to know the principles and use of computers. They take this knowledge one

step further and use this knowledge to understand the needs of the computer and the wants of the users.

The third largest field of computer science is support specialism. Computer support specialists help users understand computers, and organizations with help with specific programs and applications. Their main job description consists of assisting individuals with computers and applications. Therefore, computer science is applied in this field by using the knowledge of all computers and various applications to problem solve ways in which using computers can become easier for those whose main job is on the computer, but they don't want to be responsible for going through numerous steps to complete a simple task. Computer support specialists also apply computer science when something on a computer or program goes wrong and they must jump in and use their skills to fix the problem.

The field that interests me the most is computer systems analysis. This field interests me because it studies a current computer system and its procedures, then researches and designs how to improve the system. In this position, I will have the opportunity to learn one, or maybe only a couple more, specific programs or applications and become an expert on them. This type of work excites me because I like knowing exactly what's going on and being comfortable with one computer language, in the past computer classes I've taken, has made my life a lot less stressful.

Citations

“Fields of Computer Science.” *AI Horizon: Introduction to Computer Science*, AI Horizon,
aihorizon.com/essays/basiccs/general/cs_areas.html

“information technology”. *The American Heritage® Science Dictionary*. Houghton Mifflin
Company. 24 Mar. 2018. <Dictionary.com
<http://www.dictionary.com/browse/information-technology>>