Brendan Moreland

Professor Michael

Introduction to Computer Science

3/20/19

Fields Report

Since the beginning of electronic computing in the 1940’s, the computer science industry has been advancing at a startling rate. Computer science is the study of computers and computing concepts that focuses mainly on the efficient programming of computers. Computer science can be considered the “umbrella term” that includes a wide range of other specialties, like hardware, software, and information systems.

Computer science has strong connection to a slew of other disciplines as well. There are many problems in science, engineering, healthcare, security, and business that can effectively be solved using computers. Computer science concepts and theories can be applied to different areas of these disciplines in order to make these jobs easier and more efficient. For example, the field of healthcare utilizes the science of computers to make it easier than ever to sift through an abundance of research to get to the core of an issue.

Information technology, on the other hand, is a field of computer science which refers to the development and maintenance of computer systems and software. It involves the installation, maintenance, and organization of computer systems. The responsibilities of someone who specializes in the field of IT include managing databases and maintaining and keeping computer networks up and running. Almost every business nowadays has an IT department that is responsible for managing the company’s data and maintaining its networks and computing systems. For example, the IT department at a school might be responsible for fixing any issues related to the basic operation of computers.

Software engineering is a branch of computer science that plays a central role in almost every aspect of daily life. Software can be thought of like a set of instructions for a computing system to follow. Without software, most computers would be completely useless. For example, a computer’s operating system, like Windows, MacOS, or Linux, is a type of software that tells your computer how to execute applications, schedule tasks, and carry out other basic functions.

Software Engineering is the branch of computer science that I am most interested in. I find software engineering the most interesting of all the computer science fields because I feel that it allows me to implement my own creativity and ideas in order to improve an already existing program, or create my own. With software engineering, I have the freedom to work for a slew of different companies in different fields.

It is important to understand the effect that the field of computer science has on other disciplines. In a world where technology is becoming an increasingly crucial part of our everyday lives, it is important to stay up to date on all of the newest advances in computer technology, as computer science is a tool that can be used by anybody in any discipline to make things easier.

Brendan Moreland

Professor Michael

Intro to Computer Science

4/8/19

Report Report

The first thing I did after reading the assignment instructions is figure out what the difference was between computer science, software engineering, and information technology. Once I had an idea in my head about what these three different fields were, I began to write a little bit about each one as I found out more about them. The next thing I wanted to know was what someone in each of those fields did on a day-to-day basis to get a better feel for what each field was all about. Once I had some information, I began to figure out how I was going to organize my thoughts so that whoever was reading the report could do so in a way that made sense.

As a software engineering major, I already knew that I was most interested in the field of software engineering as opposed to computer science and information technology, and reading up on each of those fields only reinforced my interest. I also had to articulate my thoughts in a way that would be easy to understand for someone who has no background in computer science, software, or IT.