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Fields Report

While the average person may surmise that computer science, software engineering, and information technology refer to the same entity, these definitions differ in numerous ways. Computer science, in general, deals with information processing via computers, while software engineering refers to applying systematic methods to develop, design, test, document, and deploy computer software. Information technology, on the other hand, focuses on the equipment itself used for the acquisition, processing, and distribution of data (International Organization for Standardization, 2019).

Perhaps the most consumer-oriented field of computer science is that of a computer support specialist. Computer support specialists work either with an organization or directly with the user in order to support, troubleshoot, and diagnose their computers and networks. As of 2017, the median wage for network and computer support specialists, respectively, is $62,340 and $50,210 USD (Bureau of Labor Statistics, 2018).

Another arena of computer science is the software developer. Developers create software programs, or they can also create an underlying software framework, such as an operating system or firmware for a device. Software developers work in conjunction with computer programmers, the programmers writing most of the instructions into code the computer can understand. The Bureau of Labor Statistics projects the field of software development to increase by 24% in the next 7 years. The median annual wage for a

software developer is $101,790 USD, and $107,600 USD for a systems software

developer, as of 2017 (Bureau of Labor Statistics, 2018).

This brings us to the role of another computer scientist's field, the computer

programmer. Using the designs created by software developers, computer programmers

write and debug code that allows these designed programs to function properly. Recently,

there has been a decline in this field in the United States, as companies tend to hire

programmers overseas where labor is cheaper. The median wage for a computer

programmer, as of 2017, is $82,240 USD per year (Bureau of Labor Statistics, 2018).

Out of all these fields, the field I am most interested in pursuing is that of a

computer support specialist. My reason for choosing this field is to educate consumers

and help them make better choices. Most consumers have little knowledge of their

electronics, except for what their manufacturers tell them. In addition, these

manufacturers have been progressively engineering their electronics to be difficult or

near-impossible to repair and drastically reducing their quality. Being in this field would

allow me to better educate consumers on how their electronics work, what goes wrong

with them, and how to repair them. In addition, this would lead consumers to demand that

quality and repairability return to consumer electronics and would result in a better, more

productive world for everyone.

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