

Computer related jobs have been booming at a mind-blowing rate in the last couple of decades as more and more industries realize that computers are essential for their businesses to survive. With the rapid expanse of computers in almost all industries, the titles of these employees are often blurred between what they really are and what they went to school for. The three main focuses on computer related degrees/jobs are computer science, software engineering, and information technology or IT. The issue with classifying a job under just one of these is that, they are all similar and easy to confuse, and the jobs that are listed often require skills and knowledge of any of these three majors. However, there is a fundamental difference between the three and I am going to do my best to explain it.

Starting off with the easiest one to differentiate, information technology is almost like the support class of a video game. IT technicians are usually the ones that you call on to help with any troubleshooting issues going on. Thus these people should have good communication skills to explain to the customer what going wrong and what they are doing to fix it. Alongside this, depending on the job, IT people also maintain networks and servers for businesses, schools, and more. They usually do not need as much knowledge in computers as software developers but once again, depending on what their job is they might have to know as much or more in terms of hard skills than their peers. Jobs can range from help desk support to the head of IT security for a business.

Computer science focuses on the theories behind advanced computer concepts and the logic/mathematics that make computer programs work. Although mostly interchangeable with software engineering, it supports a more specialized approach with greater flexibility to take advanced computer courses. It deals more with designing and developing programs with concentrations in algorithms and data transformation. People with degrees in computer science may more often find themselves in positions of research to further the ability of computers hence the name computer “science”.

Software engineering on the other hand focuses more on the design and completion of software systems. It's a more structured course with an emphasis on seeing a software application through from start to finish making it a more applied course than its counterpart computer science. In software engineering, there are more core courses that a student is required to take. Graduates with degrees in software engineering are more likely to end up in fields that are focused on utilizing existing computer concepts to create new software systems. In a sense it is a more practical approach to computers.

The field that I find myself most drawn to is software engineering because I feel more comfortable working with things that are grounded in proof so that I can create something else entirely. The abstract/theory side that computer science offers doesn't appeal as much to me because I would rather know what I am working with to make something great. I am a hands on learner and thus the practical approach that software engineers take to create their systems is what I feel more confident in.