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Honors LA II

4 March 2019

Software Engineering: A Career Refining the Future

Software has improved at a rapid rate since its creation. Every year, it becomes more useful and efficient. These advancements are only possible due to the high demand for software engineers. With large technology companies striving to release newer and cheaper software, there is constant competition in trying to get the best and most developers. In addition, companies that are not in the technology industry are hiring developers to make advancements in their own industry. This increasing demand from employers for software developers makes the field exceptional to be in. Not only will choosing this career contribute to the advancement of technology in a number of industries, but the high demand for software leads to competitive salaries from employers. Software engineering is a great career choice due to its positive impact on society, its high salary and job outlook, and its education that allows aspiring developers to work in a multitude of industries.

Software engineers contribute a great deal to the technological advancements that make daily life what it is today. People in this career are responsible for the designing and creating of software. According to the U.S. Bureau of Labor Statistics, there are two categories of software that developers specialize in, which are applications and systems. Those that focus on applications create software that is designed to be used by the end user. Developers that specialize on systems work on software that works with a computer's hardware ("Software

Developers”). Both application and system software created by developers positively impact society. Some of the most common uses of applications specifically are to connect people through social media, provide entertainment, improve education, and maximize profits in business. In addition to these, application software is implemented into objects that are not traditionally computers or mobile devices, such as in automobiles and TVs. System software is also very useful, allowing the user to interact with their computer. The computer’s operating system is an example of system software. Common examples are Windows, Android, iOS, and Mac OS. With this extra responsibility of improving society, however, software engineers can expect the need to keep up with modern technology. In addition, developers need to fulfill strict deadlines, meaning that it is not uncommon for them to have to work overtime, exceeding their typical 40 hour week (Hughes). With these expectations on developers, the ultimate end result is that more software gets created and that more advancements in technology are made. Choosing to become a software developer proves to be a rewarding career, improving society by creating new pieces of software.

Along with the important role being played in providing people and companies software, the salary and future job outlook also makes this career a fantastic choice. The median salary for software engineers is \$83,678 while the bottom ten percent make around \$60,022 and the top ten percent make around \$123,423 (“Software Engineer Salary”). Even when looking at the low end of the range, it is clear that developers make a considerable salary. However, in order to truly know whether a developer could live comfortably with this salary, it is important to take into account the cost of living. Silicon Valley is a region in California that is well-known for its many startups and large technology companies, along with the high salaries that technology enthusiasts

make in the area. However, according to TechBeacon, even with their high salaries, most software developers are unable to afford to live in Silicon Valley (Pronschinske). Although the salary in Silicon Valley is substantial, the high demand for companies and developers to be in this area makes the cost to rent or buy a home very expensive. Therefore, it would be best to live in an area with a lower cost of living even if the pay is less. When salary is adjusted to take the cost of living into account, if a software engineer made a salary of \$135,853 in San Francisco, developers in Austin would be making around \$198,353. Other cities, such as Denver and Seattle would also have a much higher adjusted salary compared to San Francisco (Ricketts). When choosing an area to work, as long as the cost of living is taken into account, this career could pay very well. The field's estimated future growth is even more promising than its salary. According to the U.S. Bureau of Labor Statistics, "Employment of software developers is projected to grow 24 percent from 2016 to 2026, much faster than the average for all occupations" ("Software Developers"). The need for more software as technology advances makes it clear as to why this field is estimated to grow at such an accelerated rate. As more tasks can be made easier using software, more developers will be needed. This projected growth ensures that this is a stable job choice and that employers will always be looking for more software developers. This field is currently very rewarding, and it will only increase in demand as technology advances.

In addition to the high pay and job outlook, it can be favorable to choose this career because of the flexibility of a degree relating to software development. Aspiring software engineers typically graduate with a bachelor's degree in computer science. However, some universities offer a degree in software development. These, along with other degrees that relate to software engineering, offer an enormous amount of jobs in numerous industries. A related

degree not only opens up the opportunity to work for a company that specializes in technology, but it also allows an eager developer to work in healthcare, automotive manufacturing, finance, and other industries ("Exploring Software Engineering: A Comprehensive Guide to Careers and Top Employers"). Choosing a software development related major gives students the opportunity to have flexibility over their future job and industry. For example, if a college student chose to major in computer science, they could still work in the healthcare industry as a software engineer. In addition to this, if they decide that they no longer want to be a software developer, choosing a degree relating to this career still opens up the opportunity to work in a number of other computer science related positions. The reason that software development can be used in so many fields is that as technology advances, software can be implemented in and used for many currently existing industries. In addition, many companies, with the growing use of smartphones, now have their own websites, applications, and servers. Even when unsure of a definite career or industry, choosing a degree that relates to software engineering offers amazing flexibility for the future.

Software engineering proves to be a fantastic career choice because of its contributions to daily life, its appreciable salary and job growth, and its related degrees that offer opportunities in many industries. Developers create software, which improves the lifestyles of many. Besides the career being gratifying because of its social impact, choosing this career also guarantees a phenomenal salary and job outlook, which offers a comfortable life. Finally, obtaining a degree pertaining to software engineering opens up the opportunity to work in a tremendous number of industries. As technology advances and the world becomes even more reliant on it, developers are the people in charge of meeting society's demands in any industry. Of course, this career will

allow a software engineer to live comfortably, but this career is very prominent because it gives people the opportunity to contribute to society and the many industries that can benefit with advancements in technology.

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