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Intro to Computer Science
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This paper will discuss computer science, software engineering and information technology. Computer science is the study of the theory, experimentation, and engineering that form the basis for the design and use of computers, while a software engineer is a person who applies the principles of software engineering to the design, development, maintenance, testing, and evaluation of the software that make computers or other devices containing software work, and information technology is the application of computers to store, retrieve, transmit and manipulate data or information, and is usually used in business.

Systems analysts, computer programmers, and database administrators are three fields in computer science. Computer systems analysts monitor an organization's computer systems and processes to help clients operate their businesses more efficiently. Systems analysts use their skills with technology and business to design advanced information systems for an organization and their clients. Computer programmers write the code that allows all computer applications to run. They write the millions of lines of code it takes to run everything from our phones to satellites. Programmers do this by communicating with computers in languages like C++ and Python which allows them to build programs. Database administrators oversee an organization's information, and optimize data accessibility for the business and protect digital property from hackers. DBAs protect existing databases by backing them up and developing internal security measures. They also monitor databases to ensure ease of use, while planning and implementing expansions.

I want to go into computer programming which is why I am going for a software engineering degree. I want to use my degree to help develop advancements in medical technology like pacemakers for hearts. I want to do this because my grandma has a pacemaker and her experience has influenced me to try and improve the technology. Surgeries also seem very common in my family so I would like to help improve medical technology so that I can have confidence that there are increased chances of success and know that my family and everyone else who has to go through a surgery is safer. Programming to me is also important because computers have become such an integral part of our society and so many

people rely on the information and abilities that computers provide that I believe we should constantly be seeking improvement to push the boundaries of what we are currently capable of.

Citations

- https://www.computerscience.org
- Dale, Nell, and John Lewis. *Computer Science Illuminated*. Boston: Jones and Bartlett Publishers, 2002. Print.