Jose Silvestre

Professor Vanselow

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Fields Report

Dear Mom and Dad,

Choosing a major in the world of technology is challenging because there are many majors to choose from and they all stem from Computer science.

Computer science is innovation and research of computing technology. Innovation is developing theories to understand computers in the present and in the future, developing algorithms for swifter computation, using programming languages to create apps and software, designing internal and external components of technology, and more. Computer science is so vast that it has many subsections like software engineering and Informational technology. (Computer…Scientists, 1).

Software engineering is subsection of computer science that focuses on programs. Software engineers solve issues in existing programs and increase efficiency of program. They create programs using extensive knowledge of programing languages and mathematics. Programs include mobile apps, entire interfaces of devices, and even self-learning algorithms (Software Engineering Careers).

Information technology (IT) focuses on communication and infrastructure of technology. The IT crowd make sure communication across platforms is efficient and working. They use programming to secure connection and privacy. Also, IT deals with hardware setup and

functionality (Guide to IT Careers). Just as IT is part of computer science a broad major, there are many fields of technology to work in.

Artificial intelligence (AI) is "the science and engineering of making intelligent machines that have the ability to achieve goals like humans do (Adams, Kim, et al., 2)." For an AI to achieve human goals it must learn like a human. Thinking like a human is achieved with machine learning (ML), which is an algorithm that can learn from data and adjust itself. AI is widely used, from phones to robotics (Adams, Kim, et al., 2).

The field of robotics involves hardware and software. The hardware aspect of robotics requires knowledge of electronic components: transistors, batteries, processors, and more. Robotics also includes knowledge of design. The software aspect is also mixed in with artificial intelligence. Programing of algorithms that could adjust themselves: machine learning. The demand for robotics is big with companies like, Tesla, Google, even the U.S military (ChanJin Chung, C. J., et al., 1).

Privacy and security field on the internet is known as cyber security. This area is great for information technology experts. Cyber security uses programing languages to create systems to protect against hacking, systems include firewalls and password setups. In fact, this field teaches to hack, knowing how to hack allows knowledge to protect against hacking. This involves using algorithms and high-level math. (Cyber Security Education).

Of the fields I have learned about, I am very interested in the artificial intelligence. I love smart phones like google pixel. The pixel has the smartest camera on any phone. For example, it can create a boca effects without the need of a telephoto lenses unlike the iPhone xs and Galaxy note 9. The single lens is helped by AI which detects what is in focus, and what it needs to blur out for boca effect. The pixel is also able to take magnificent night and zoom in pictures with the

help of AI. Such features by phone are fascinating. Google's AI is why I want study software engineering. I will use my future knowledge of programming languages and algorithms to create AIs one day. Please support me mom and dad.

Works Cited

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