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Mrs. Ecke

Honors Mentorship

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Computer Engineering Annotated Bibliography

Source

Kuhler, Jeanne L., B.S., M.S., Ph.D. "Computer Engineering." *Salem Press Encyclopedia Of Science* (2013): *Research Starters*. Web. 23 Feb. 2014.

Summary

This article tells what computer engineering is all about. It gives a brief overview of what engineering is by stating, “Computer engineering refers to the field of designing hardware and software components...”. It gives a brief history to show how new the field is. What is so useful about the article is that describes in detail what computer engineers work with and how those components work. An example would be the statement in the article is, “…Each cable contains a bundle of threads that work by reflecting light waves. They have much greater bandwidth than the traditional coaxial cables and can carry data at a much faster rate of 100 gigabits per second because light travels faster than electrical signals.” This article talks about each of these components in order; hardware, Circuit Design and Connectivity, Software, Stand-Alone Computers, Inner-Network Service Architecture, Interfaces, and Inner-Network Interfaces. The article is rounded out by describing different careers associated with a computer engineering degree and the future outlook of this profession.

Potential Quotes

“Computer engineering refers to the field of designing hardware and software components...”

“…Each cable contains a bundle of threads that work by reflecting light waves. They have much greater bandwidth than the traditional coaxial cables and can carry data at a much faster rate of 100 gigabits per second because light travels faster than electrical signals.”

“Computer hardware and software generally can be arranged in a series of hierarchical levels, with the lowest level of software being the machine language, consisting of numbers and operands that the processor executes….”

(Paraphrase) Electrical Engineering and Computer Engineering experience a large overlap meaning that a computer engineering is a electrical engineer with a specialty with computers.

Assessment

This article is found on Galileo and is written by a person with a Ph.D. This article is recent since it was written in January of 2013. The author wrote this article in order for someone to research into computer engineering. They also give further readings to enhance my research. It was published in book of science.

Reflection

This article tells about computer engineering, but more importantly it tells what they work with and how those things work together. By providing me with a detailed explanation of the hardware and software components computer engineers work with, I am able to explain with more validation of why computer engineers are important. I will be able to tell what computer engineers have created and how people are affected by their inventions/improvements every day without notice.