Fields Report

The computer field is a vast and expanding field that continues to grow as time goes on. The three major fields are computer science, software engineering, and information technology. Computer science is the field that study computers and computational systems. A software engineer develops, maintains, and tests software. An information technologist focuses on installing and working with computer systems.

There are a large number of fields within each of these as well. Within the field of computer science some of the many fields include theoretical, networking, and artificial intelligence (AI). Theoretical computer science mostly deals with testing the limits of computation and applying mathematical equations on how to test these limits. Networking focus on the interconnection between computers, this can be as small as the computers within a home to something as large as linking the computers of a military together. AI is the field that deals with machine learning, attempting to teach technology to and make the technology learn for itself. Robotics is the focus within AI and how to teach the robots to interact with one another.

The field that I find the most interesting is artificial intelligence. I find this field interesting because it gives me the opportunity to work in the majority of the fields of computer science all at once. With AI there is a heavy amount of theoretical computation involved because the field of AI is still a new one. Testing the limits of what an AI can learn and how much they can learn is all within the theoretical realm. Hardware is another factor of computer science needed in AI, the circuits, chips, processors, RAM, and memory are all pieces that are needed for AI to learn and understand the world around them. Software engineering will be another valuable

component when teaching AI. Developing the proper software and updating it when bugs are found so that the AI can optimize its learning.

My fascination with AI also stems from my love of science fictions. Watching movies and shows like Star Wars, Star Trek, and Futurama, I always found that my favorite characters were the robots and AI units. From a young age I thought that R2-D2 was the most resourceful, funniest, and smartest character of the bunch. He learned from his experiences and solved problems like a human would. I would love to create an AI that could learn, and problem solve in real time, helping in many situations, from the dangerous jobs of disarming a bomb to the mundane of driving a vehicle. The future of our world is technology and computers and I want to be apart of it.