

### **Part 1:**

The career I chose is software engineering. Software engineers design and build many different programs like operating systems, network control systems and video games, as well as other things. The education required is a minimum of 4 years in university and a major in computer science. There is a wide outlook for this career since there are many different things software engineers can do. The one certain thing would be 4 years of university. The average salary in the USA in 2014 was \$106 050 per year. I am very interested in this career because I enjoy programming and like that there are many different types of programs software engineers are involved with.

### **Part 2:**

The educational institution I found is the University of Waterloo. Admission requirements are advanced functions, calculus and vectors, chemistry, physics and English. In the first year, I would take multiple math programs for engineering, physics of electrical engineering, programming, and methods of software engineering. They recommend experience in developing programs. The program is 5 years long.

### **Part 3:**

I feel like being a software engineer will help the common good because I will hopefully be working on multiple different programs that many people use every day. These programs can be things people rely on or can be something important that changes someone's life. It will help me set goals and priorities because software engineers are very busy therefore I would have to balance my time well and plan when I will finish working on something instead of doing something in my personal life.

"Software Engineering at Waterloo." *University of Waterloo*,  
<https://uwaterloo.ca/future-students/programs/software-engineering>

"Software Engineer." *ComputerScience.org*, 2018,  
<https://www.computerscience.org/careers/software-engineer/>