

Education

The University of Michigan, College of Engineering

September 2013 - April 2017

B.S.E in Computer Science & Engineering, GPA: 3.052 / 4.0

Ann Arbor, MI

Relevant Coursework:

*Operating Systems · Database Management Systems · Data Structures & Algorithms · Computer Security
Mobile App Development · Computer Architecture · Foundations of Computer Science
Discrete Mathematics · Linear Algebra*

Currently Studying (Winter 2017):

Machine Learning · Artificial Intelligence

Work Experience

Stryker Corporation

May 2016 - August 2016

Research & Development Intern

Kalamazoo, MI

- Implemented a data analysis application & GUI in C++, optimized to run under strict time restrictions
- Designed a MATLAB application to statistically analyze & graphically display large sensor databases
- Constructed a device driver for a micro-controller that controlled an external device

Taubman College of Architecture & Urban Planning

June 2015 - April 2016

Software Engineering Intern

Ann Arbor, MI

- Developed a web application that simulates the energy consumption of a building for one year
 - Implemented algorithms in Java designed to compute the energy efficiency of a given residential building
 - Programmed front-end XHTML files as well as JavaScript functions for client-server communication
-

Research Experience

Multidisciplinary Design Program

January 2016 - December 2016

UMTRI Automotive Cybersecurity

Ann Arbor, MI

- Researched creative new ways to electronically breach car security & ways to improve vehicle security
 - Collaborated to construct malicious Python scripts that attempted to manipulate a car's CAN bus
 - Gained industry knowledge of CAN network protocols as well as SocketCAN drivers
-

Personal Projects

- **Fwip:** Android app that uses the Google Maps API to help college students find & share free food
 - **Pics 'n' Words:** Python program that uses PIL to recreate an image using only colored text
 - **Modulator:** Modulus calculator designed for fractions & negative numbers, written in JavaScript
 - **Arnold Fib:** Fibonacci number calculator written in the hilarious programming language, ArnoldC
-

Technical Strengths

- **Fluent Languages:** C/C++ · Java · Python
 - **Languages:** JavaScript · SQL · HTML · CSS · XML · MATLAB
 - **Libraries:** jQuery · Bootstrap · PIL/Pillow · Boost · dpkt
 - **Other:** Android Studio · Google Maps API · Back4App · Wireshark
-