

EDUCATION:

University of Massachusetts Amherst
Bachelor of Science: Computer Systems Engineering, May 2017

COURSE WORK:

Circuit Analysis I & II, Hardware Organization & Design, Software Intensive Engineering, Computer Systems Lab I, II, Introduction to Computation, Algorithms, System Software Design, Data Structures and Algorithms

PROJECTS:

Project So-Lo (Sound-Locator) *(Fall 2016, Spring 2017) (Team of 4)*

- Video recording product that utilizes TDOA to determine the location of a sound source
- Managed the software subsystem as well as the user interface for the product
- Programmed the system using python scripting language on a Raspberry Pi 3
- Displayed final project on a webpage as well as demonstrating the product live to students and professors

Inverted Index Algorithm *(Spring 2017)*

- Coded a database index algorithm that works well for full text searches
- Programmed in C++ using a virtual machine running a Linux based environment
- Gained insight to maps and sets in the language using the Standard Template Library

Disk Scheduler *(Spring 2017) (Team of 2)*

- Programmed an external pager software that handled processes
- Gained better coding practices with C++ using vectors, maps and struct definition
- The results were simulated to check for any errors

General MIDI Explorer (GME) with Record/Playback *(Spring 2016) (Team of 3)*

- Built a MIDI receiver with the ability to record and play back musical notes inputted by the user
- Programmed an Atmega32 AVR microcontroller in C
- Presented the technical aspects and implementations to a professor

Encryption and Decryption *(Fall 2015)*

- Used symmetric algorithms for both encryption and decryption by generating a key stream
- Programmed in a Linux environment using Cygwin
- Gained a strong understanding of C language and how to effectively code using C

WORK EXPERIENCE:

Engineering Exam Proctor *(Start Date: January 21 2017 End Date: May 12 2017)*

- Oversaw a secure testing location at the University of Massachusetts, Amherst
- Maintained Windows PC and logged incoming students onto data sheet
- Reported and logged suspicious student activity to supervisor

SKILLS:

- Computer Languages: Java, C/C++, Python, HTML, CSS(Bootstrap/Foundation)
- Programs: Eclipse, Python, Cygwin, Microsoft Office, Notepad++, GIT
- Strong analytical skills and detail oriented
- Languages: English, Mandarin, Cantonese, Fuzhounese (Dialect)