

# Education

# Stony Brook University | Honors College

Stony Brook, NY

B.S. in Computer Science

*Aug* 2015 – *May* 2019

Specialization in Systems Software Development

Relevant Coursework: Cloud Computing, Systems Fundamentals I - II, Game Programming, Object Oriented Programming, Data Structures and Algorithms, Analysis of Algorithms (TA)

# Experience

### Van Andel Research Institute

Grand Rapids, MI

Student Intern - High Performance Computing

Summer 2017

- o Created a storage/cost model using Google Charts API to assist researchers in data visualization.
- o Coordinated needs assessments of data storage and performance for the Scientific Computing effort.
- o Worked under IT/Administration department heads to develop an understanding of HPC research demands.

### **Stony Brook University**

Stony Brook, NY

Teaching Assistant - Analysis of Algorithms

Fall 2017

- Held weekly review sessions on lecture content such as Big O Notation, sorting algorithms, and dynamic programming.
- o Provided one on one assistance and conceptual instruction during office hours.
- o Assisted in grading homeworks, reviewing and proctoring exams, and creating answer keys.

### **Stony Brook University**

Stony Brook, NY

Research Intern

Fall 2016

- o Developer in the Software Systems Division at the Center of Excellence in Wireless and Information Technology.
- Created dynamic, cross-browser functionality of NY Healthcare websites.
- o Parsed web entries on New York's Clinic Directory into JSON format to facilitate data processing.

# **Projects**

## Shell | C

- o Wrote a basic shell that supports scripting and operations such as builtin commands and executables.
- Implemented I/O redirection and piping on all commands.
- o Managed signals for child process state changes, handling foreground processes and jobs.

### Dynamic Memory Allocator | C

- o Maintains a segregated free list to manage dynamic memory allocation.
- o Implemented error-checking malloc, realloc, and free functions with backwards coalescing.
- o Created unit tests using the Criterion Unit Test framework.

#### Regio Vinco Map Editor | Java

- o Developed a map editing application which tests players on geographical knowledge.
- Includes file I/O using JSON, with sound and image file editing capability.
- o Implemented an algorithm to interpret coordinate data and construct interactive polygons to represent countries.

### Skills

Programming Languages: Java, C, Javascript

Technologies: Google Cloud Platform (GCP), Git, Nginx, Firebase, LaTeX, Bootstrap