
EMPLOYMENT EXPERIENCE

Software Engineer, General Dynamics Mission Systems

Jul. 2020 - Present

- Redesigned and implemented a failover mechanic using C++ and RTI DDS for a security system product to ensure reliability
- Worked with a team in an agile environment to develop, test, and securely deliver a contracted product
- Implemented unit tests in C and C++ during TDD to test product component functionality and facilitate development
- Developed standardized interfaces in C to add portability/interoperability between hardware and software components

Development Team Intern, Easy Breathe Inc.

May 2019 - Aug. 2019

- Updated front end components to be scroll/device responsive using CSS and PHP, improving browsing experience
- QA tested ~20 back end updates to ensure QoL updates for the sales team were functioning and non-disruptive
- Prototyped front end pages and A/B tested with Google Analytics to increase customer activity on website

Data Science Intern, Service Management Group

January 2019

- Generated linear models with consumer data, using Python scikit-learn, to assess potential for a new service

Computer Science Research Assistant, Williams College

June 2018 - Aug. 2018

- Researched and updated legacy code in C for a log-based NAND-memory file system to make it functional
- Built an internal debugging tool in C to check and display file system memory contents to aid in future developing
- Collaborated with another research student to design a poster that presented the project to a general audience

Computer Science Teaching Assistant, Williams College

Sept. 2017 - Dec. 2017, Sept. 2019 - Dec. 2019

- Assisted students in lab to help them practice coding skills and complete projects in Java
- Graded assignments and gave thorough feedback to help students identify areas of strength and weakness

SKILLS

- **Languages:**
 - Fluency in Java, C, C++
 - Prior experience with XML, F#, Clojure, CSS, PHP, Python, SQL, x86 Assembly
- **Tools:** Git, GDB, Emacs, FUSE, InVision, SonarQube, Smartbear, RTI DDS, Jupyter, Stata, LaTeX, Google Analytics, Photoshop

EDUCATION

Williams College, Williamstown, MA

June 2020

- Bachelor of Arts in Computer Science and Economics

GPA: 3.78

PROJECTS

Crash Recovery for a Log Structured NAND Based File System, Research Project

Sept. 2019 - May 2020

- Researched, designed, and partially implemented a comprehensive solution in C for file system crash recovery
- Wrote a project proposal and gave a presentation on the problem, solution, and suggested methods of evaluation

Clink! (Prototype Event Planning App), HCI Team Project

Sept. 2019 - Dec. 2019

- Conducted user interviews and developed task focused scenarios, sketches, and storyboards for an event managing app
- Created, tested, and evaluated a paper and digital prototype in InVision for our app
- Designed a website <https://clink-app.github.io/clink/#> to showcase our app prototype and creation process

F Natural (Language for Music Generation), Programming Languages Team Project

Nov. 2018 - Dec. 2018

- Created a well-documented language that generates music from rules provided by the programmer
- Implemented the language parser to allow for arbitrary order of rule declarations, using F#