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### Education

M.S. Computer

Science

Old Dominion University

Norfolk, VA *GPA: 3.8* 

Coursework:

Algorithms & Data structures, Distributed Systems, Data Science, Big Data, Machine Learning, Numerical Methods, Cryptography, DevOps.

Projects:

LiftRight||Swift, Rust, Matlab, iOS, 2D Graphics, HCI, CI/CD, Kubernetes, MongoDB

Repetition and set segmentation algorithm for early, online identification of weight training exercises using a single sensor, and gamified platform for guiding a user into modifying their form.

Preparing to conduct a multi-week study to verify our application, and compare form metrics with, and without the LiftRight system.

Designed, built, and deployed iOS application and Rust data-collection server.

Launear Algebra | | Rust

Pure Rust implementation of a general purpose Matrix with least squares approximation, natural cubic spline interpolation, piecewise linear interpolation, and gauss-jordan elimination.

Trend seeking in NYC with CitiBike | | Python, Apache Spark, Big Data

Leveraged GIS, Citibike, and IRS datasets to identify changing trends in New York City neighborhood tax data.

At-Risk Student Detection for Online Education Platforms | Python, Machine Learning, Data

Science, Random Forest, SVM, Logistic Regression, Scikit-learn

Developed and compared classical machine learning models, and applied data wrangling techniques to the .

Associations:

Association for Computing Machinery | National member

ACM-W | ODU chapter vice-president (2020 - present)

**B.S. Computer** 

Coursework:

Science

Algorithms & Data structures, Foundations of Computing, Discrete Mathematics, Calculus, Philosophy.

Temple University

Internships:

Philadelphia, PA

Jolicloud | Paris, Fr. | Ruby on Rails, SQL, C#, Mono, Linux

GPA: 3.2

Google Summer of Code | C#, Gtk, Mono

## Professional Experience

### U.S. Navy

Navigation Electronics Technician (Submarines) First Class | Operations, AC/DC/Digital electronics,

TS/SCI, Instructor

Adaptable to high operational-tempo environments: 3 overseas deployments in 4 years.

Owner of maintenance work center for all navigation and interior communication equipment.

Responsible for ensuring critical equipment operational and maintained to support an unpredictable and high-tempo operational schedule.

Designed and taught curriculum for advanced submarine navigation which is delivered to senior submarine navigation personnel across the submarine force.

Direct supervisor for division of 5-7 sailors during overseas deployments; responsible for safe undersea navigation and all preventative and corrective maintenance for ship's critical navigation and interior communication systems.

Trained 10 personnel through initial ascension qualifications through senior qualifications. 100% advancement to Second Class Petty Officer for sailors who were assigned as mentees.

Awarded: Navy & Marine Corps Achievement Medal (6), Good Conduct Medal (2), 2018 USS San Francisco Junior Sailor of the Year.

# Trilogy Education Service

Full-Stack Developer Mentor | Ruby on Rails, SQL, JavaScript, React, HTML, CSS, Heroku, AWS, Git

Provided weekly 1-on-1 assistance and professional mentorship to students enrolled in Full Stack Web Development bootcamp provided through multiple universities. Provided technical and career coaching to students as they progressed from creating static HTML and CSS websites to building complex, interactive web apps powered by Ruby on Rails, PostgreSQL, and React.

#### Canonical Ltd

**Software Engineer** | Python, C++, C, JavaScript, Linux, Bash, Jenkins, Bazaar, QA, Devops Developed automated user acceptance and integration testing framework for flagship product. Lead transition to continuous integration development model for multiple projects.

### **Projects**

MonarchBot||Rust, CI/CD, Docker, Mailgun, Kubernetes

Discord bot for protecting ODU CS students from cyber-abuse by verifying members of community Discord server have a valid @odu.edu email address.

Environmental Chemistry | | R, Python, React, Bash, HPC, Docker

Assist Hatcher Geochemistry lab group with various data analysis and visualization scripts; simple live Text-to-QR generator developed for Hatcher geochemistry lab.