

Rachel Shaw

PLATFORM ENGINEER

+1 406.285.1665 | rachel@rachelsfba.com | rachelsfba.com | rachelsfba

Overview

Platform Engineer formerly with the U.S. Navy's Submarine-Launched Ballistic Missile (SLBM) program. Experienced cross-functional engineer with particular interests in Linux systems, automation, and reliability. Prior technical lead for several SLBM Fire Control and Mission Planning products.

Technical skills

Proficient Python, C, bash/zsh, GNU/Linux, Docker/containers, configuration management, Jenkins, GitLab, CI/CD, git, release engineering
Familiar Java, C++, Terraform, IaC, Ansible, DigitalOcean, AWS, systems programming, computer networking, monitoring, observability

Work experience

Naval Surface Warfare Center–Dahlgren Division

Dahlgren, VA

SLBM PLATFORM ENGINEER

January 2020 – January 2022

- Defined and maintained ownership over a new internal development platform, improving velocity and reducing toil for 10s of internal Java, C, and C++ product teams.
- Managed critical infrastructure, including GitLab, Jenkins (Blue Ocean), Confluence, Jira, etc., providing developers with a self-service developer platform that reduced cycle time from a matter of weeks to hours.
- Onboarded teams to new software stack and used developer feedback to add new capabilities and improve discoverability by writing code mainly in Python, bash, and Groovy.
- Improved the productivity of the department's 250+ enterprise users as information management system technical lead by organizing 60+ years worth of program and software documentation into an accessible format.

SYSTEMS SOFTWARE ENGINEER

January 2019 – January 2020

- As maintainer for a mission-critical data management application for removable media, I wrote C code interfacing with the Linux SCSI drivers and maintained the user-facing Java GUI and JNI middleware.
- Separately, I introduced a unified log analysis tool (written in Python) for raw Fire Control data, consolidating several older, purpose-build tools to provide faster turnaround time to issues encountered in the submarine fleet.

SOFTWARE ENGINEERING INTERN

May 2017 – January 2019

- Automated 100s of static analysis rules for C/C++ code by designing a replacement for an aging bespoke standards checker tool for C.
- Drafted plans for re-architecture of mission-critical corporate intranet components, using A/B tests and user interviews to improve prototype usability.

Department of Computer Science, University of Virginia

Charlottesville, VA

LEAD CAPSTONE DEVELOPER

August 2017 – May 2018

- Designed and implemented a Django and Bootstrap-based event management platform for a local LGBTQ+ non-profit as part of a team of 7 fourth-year computer science undergraduates, allowing the non-profit to better schedule and organize community events.
- Coordinated implementation of features across other team members as project lead, ensuring all members developed cross-functional skills in full-stack web development.

TEACHING ASSISTANT (TA), UNDERGRADUATE

January 2016 – December 2016

- Conducted two semesters of exploratory laboratories for the department's CS 1110/1111: Introduction to Programming courses in Python, providing ~40 students per semester with a foundation in computer science principles.

Education

University of Virginia, School of Engineering and Applied Science

Charlottesville, VA

B.S. COMPUTER SCIENCE, *Magna Cum Laude*

August 2015 – May 2019

Rappahannock Community College

King George, VA

ASSOCIATE OF ARTS & SCIENCES, *Summa Cum Laude*

August 2011 – August 2015