Rachel **Shaw**

DEVOPS ENGINEER

☐ +1 406.285.1665 | ✉ rachel@beijaflor.es | ⬛ obeijaflor | ⬝ beija-flor

Overview

Current DevOps Engineer for the U.S. Navy's Submarine-Launched Ballistic Missile (SLBM) program. Responsible for devising creative CI/CD solutions in support of SLBM Fire Control and Mission Planning products. Experienced Pythonista and back-end developer, with particular interests in process automation, infrastructure as code (IaC), and designing for reliability.

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

Technical skills

Proficient   Python, C, C++, Java, bash, GNU/Linux, LaTeX, git, Jenkins, GitLab CI/CD
Familiar   Django, pandas, Docker, x86, systems programming

Work experience

Naval Surface Warfare Center–Dahlgren Division   Dahlgren, VA

SOFTWARE ENGINEER (DEVOPS)   January 2019 – present

- Drastically shortened time to build and test SLBM Fire Control C/C++ software through QEMU hardware emulation and Jenkins CI pipelines, cutting development time from a matter of days to minutes.
- Pioneered a general-purpose CLI tool for Fire Control data analysis in Python by ingesting data from 10s of different data formats and consolidating functionality from several older, purpose-built tools.
- Migrated decades of siloed documentation and source code into industry-standard Agile development tools like Atlassian Confluence, Jira, and GitLab as information management team lead, improving productivity for some 250+ users.
- Ported low-level Small Computer System Interface (SCSI) driver handling code in C from an x86 to x86_64 GNU/Linux platform as lead developer for a data management application for removable media.

Naval Surface Warfare Center–Dahlgren Division   Dahlgren, VA

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 rearchitecture 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 + 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.

Department of Computer Science, University of Virginia   Charlottesville, VA

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.
- Offered personalized one-on-one mentoring and coursework support to students via office hours and online course forum presence, strengthening student and instructor's grasp of the material.