Alden Davidson

adavidson@pm.me
570-412-3528
https://github.com/ananaso

PROFESSIONAL SUMMARY

Software engineering professional with experience developing and designing web applications using TypeScript, React, CSS, Kotlin, and Spring. Adept at developing and deploying backend and frontend systems, responding to and resolving bugs and production issues in low-visibility environment, and identifying further areas of improvement in existing codebases.

SKILLS

Languages: CSS, Kotlin, LaTeX, TypeScript

Software: Docker, GNU/Linux, MySQL, React, Spring Framework

Practices: Extreme Programming, Test-driven development

Foreign Languages: German (A2/B1), Esperanto (A1)

WORK HISTORY

01/2022 – Current **Full-stack Software Engineer**
United States Space Force | Los Angeles, CA
- Developed and sustained two full-stack applications for 1200+ space command and control users requiring worldwide availability
- Practiced test-driven development at the unit, integration, and end-to-end levels to ensure consistent code quality in continuous integration environment
- Analyzed existing software implementations to identify areas of improvement
- Participated in requirements gathering for high-visibility executive-directed action to solidify prerequisites and determine best technical solution to meet user needs

04/2020 – 06/2021 **GPS Mission Director**
United States Space Force | Los Angeles, CA
- Commanded 12-member team for readiness events and launch & early orbit operations (L&EO)
- Conducted L&EO for SV05

11/2019 – 12/2021 **Project Manager**
United States Space Force | Los Angeles, CA
- Planned, scheduled, and negotiated $28M follow-on for $34M project
- Monitored project performance to identify areas of improvement and make adjustments
- Coordinated and led cross-functional team of 8 to resolve project issues and mitigate risks
- Oversaw 30+ member team of contractors performing software development
- Provided detailed project status updates to stakeholders and executive management

06/2017 – 12/2017 **Robot Programmer Intern**
RT Leaders | Munich, Germany
- Worked with 5-member multidisciplinary team to design and build bespoke robotic cell battery construction machine, increasing customer safety and productivity
- Planned and implemented operations for 12 FANUC unites across a manufacturing line to fit a new product design

12/2016 – 05/2017 **Software Development & Research Intern**
RIT Computer Engineering Department | Rochester, NY
- Researched and implemented networking protocols within a virtual domain for realization of real-world radio use cases, using a synthesis of C++ and Python
- Worked independently with regular progress updates to customer and supervisor

09/2014 – 05/2018 **Student Manager**
Sol's Underground | Rochester, NY
- Supervised 4+ student employees per shift
- Ensured compliance with food safety procedures
- Managed customer problems and complaints

EDUCATION

05/2019 **Bachelor of Science: Computer Engineering**
Rochester Institute of Technology | Rochester, NY
- Senior Design: Low-cost Fundus Camera, worked with multidisciplinary team to design low-cost functional modern fundus camera capable of capturing screening-quality retinal images
- Minor in Military Studies & Leadership
- GPA 3.55

10/2020 – 04/2021 **Supra Coders Software Development Immersive**
United States Space Force | Los Angeles, CA
- 3-month full stack development bootcamp with Defensive Cyber Operations - Satellite follow-on assignment
- Configured Hack-A-Sat network with Puppet
- Developed COSMOS TT&C protocol decoder

PROJECTS

AT-AT - Aggregate Tasker Administration Tool

– Proof-of-Concept to replace Department of Defense's Tasker Management Tool
– Designed and implemented tasker inbox view/response features and accompanying database and API
– Built with Javascript, Express, PostgreSQL, React, and AstroUXDS CSS

Low Cost Fundus Camera | Senior Design

– Designed low-cost functional modern fundus camera capable of capturing screening quality retinal images
– Interfaced Raspberry Pi with linear actuators, motor HAT, and controllable LEDs
– Programmed user interface in PyQt

Semi-autonomous Cell Battery Constructor

– Planned and implemented operations for FANUC R-30iB to construct experimental cell batteries
– Designed semi-autonomous function for space-constrained, pumped argon environment

USAF Ribbon Rack Visualizer | Personal Project

– Developed PyQt application for visualizing ribbon racks with proper order of precedence.
– Created with option to extend support to other branches of the military.

Genesee River Raft | Personal Project

– Constructed raft by hand from fallen timber and rope
– Successfully floated it from RIT to the University of Rochester boathouse

COMMENDATIONS

Boy Scouts of America

– Eagle Scout, Computer Sustainability and Recycling Drive
– Order of the Arrow: Vigil Honor

National German Honor Society

– Chapter President, 2018-2019