


ALEXANDER CONGER

Software Developer

 alexconger.dev

 aconger00@gmail.com

 253 334 2613

 github.com/rocmalone

 Kent, WA

 /in/alexconger

SUMMARY

Early career Software Developer with background in Mechanical Engineering. Demonstrated skill at technical communication and problem-solving; unashamed to ask questions and determined to grow quickly. Experienced in design iteration with stakeholders, full-stack development, and data structures & algorithms.

SKILLS

Languages: Java, SQL, Python, JavaScript, TypeScript, HTML/CSS, C++

Technologies: React, Angular, Spring, PostgreSQL, MySQL, SQLite, MongoDB, Azure, Node.js, Docker, Selenium, Linux, Git

EXPERIENCE

- 8/2022 - 6/2023 **Structural Engineer** The Boeing Company
- **Created automated front end for internal database with Python and Selenium WebDriver.** Used by 7 team members, resulting in cumulative time-savings of 4-hours weekly vs. original front end.
 - **Analyzed aircraft systems using physics and material science.** Authored technical reports for FAA and explained analysis to non-technical stakeholders. Awarded by management on two occasions.
 - **Lead task force to investigate production defect.** Developed tests and analysis over 5-months to show acceptability of defect. Received management recognition for avoiding expensive fleet-wide repair.
 - **On-call to provide fast-paced factory & fleet support.** Analyzed critical production defects and customer fleet damage within 4 hours to prevent factory stoppages and flight delays.
- 6/2021 - 9/2021, 6/2020 - 9/2020 **Engineering Intern** The Boeing Company
- **Analyzed structural strength of aircraft** parts using hand-calculations and computational methods.
 - **Used pandas (Python) to process factory data and identify improvements.** Visualized with matplotlib.
 - **Quantified team process bottleneck and proposed solution to management with success.**

PROJECTS

- Video Game (C#, GDScript) **Rat House Rumble** [View on itch.io](#) [Source on GitHub](#)
- Multiplayer FPS game in 3D-scanned environment. Implemented object-oriented principles incl. composition, inheritance, polymorphism, and observer & singleton patterns. Used debugging tools & conducted performance analysis to optimize code and eliminate crashes. Managed source with Git over 7 months.
- Embedded system (C++) **Novel Thermoelectric Generator (team project)**
- Technical lead in college team building a hand-held generator using novel technology. Programmed control system on Arduino in C++ to manage fuel flow, cooling, fault detection, and operational validation.
- Web (Angular, Spring, MySQL) **Travel World eCommerce Website (academic)** [View deployed site](#) [Source on GitHub](#)
- Online store with multi-stage purchase flow, cart, order tracking, and validation. Built with Model-View-Controller pattern and a RESTful API. Deployed on Azure using Docker and on Ubuntu Server.
- Web (React, Express.js) **deathroll.online** [View deployed site](#) [Source on GitHub](#)
- Online AI interaction game. Used adapter pattern, RESTful API, & queue. Prompt engineered LLM (GPT-4).
- Web (React, Linux, Docker) **alexconger.dev** [View deployed site](#) [Source on GitHub](#)
- Portfolio site. Designed UI/UX & implemented DNS/SSL ensuring access/security. Deployed on Ubuntu Server & configured to host multiple projects as Docker containers and background daemons.
- System admin **Linux Server Admin & Linux Daily User**
- Linux System Admin since 2021. Configured & maintained services using Docker & Portainer incl. Git server (Gitea), cloud (NextCloud), web (Apache), media, & file server with 6 users.

EDUCATION

- Expected 3/2024 **Western Governor's University** Salt Lake City, UT
- B.S. Computer Science
- 9/2019 - 6/2022 **University of Washington** Seattle, WA
- B.S. Mechanical Engineering

CERTIFICATIONS & LEADERSHIP

Certs: LPI Linux Essentials, Professional Scrum Master I, ITIL v4 Foundation

Leadership: Master of Ceremonies at professional development events at Boeing (avg. 30 attendants).