EXPERIENCE

Viasat Software Engineer San Diego, CA August 2018 - November 2023

- Significantly reduced application suite build/test times by >3 hours through proposing, planning, and leading a summer intern project focused on process optimization and efficiency in a containerized build environment.
 - Dramatically reduced the number of files compiled by implementing modern **CMake** practices, resulting in a significant improvement in build efficiency and a more streamlined development workflow.
 - Accelerated development by implementing ccache in **Docker** build environment, cutting down data transfer with **volume mounts** to the host.
 - Effectively managed and mentored participants, providing guidance through the project's technical and operational complexities, ensuring successful project completion and a valuable learning experiences.
- Ensured compliance with rigorous security standards in cross-virtual machine communications by designing and owning a C++ library that managed **OpenSSL**-secured **DTLS** connections.
 - Prioritized developer convenience with argument-based config, allowing simple setup of encryption, timeout, SSL roles, and addresses abstracting away the complexities of underlying implementation.
 - Enhanced connection stability by integrating **multi-threading** for efficient and reliable heartbeat monitoring, facilitating automatic re-establishment of SSL connections for continuous operation.
 - Boosted efficiency and throughput by employing a multi-threaded approach to queue and send packets, optimizing network performance and data handling.
- Enhanced fault diagnosis & system reliability with C++ library that created files detailing recent activity from failed **Docker/Kubernetes** containers, enabling more precise troubleshooting and system insights.
- Deep intellectual curiosity and passion about learning through **methodical study**, **organized note-taking** using **Zettelkasten** method, systematic reviews using **spaced repetition flashcards**.
- Boosted team velocity by 25% over three-year tenure as a **Scrum Master** for 8-member development team, all while excelling in my primary role as a developer.
- Accelerated code review completions and development quality by revitalizing processes and training, fostering clear communication, faster issue resolution, and increased team knowledge.
- Lowered dependency on individual expertise by initiating peer education program, conducting needs assessments, mobilizing subject matter experts, and creating a comprehensive video knowledge base.
- Ensured rapid issue resolution and system reliability through critical **on-call technical support**, demonstrating a deep understanding of system architecture and cross-team product integration.

Viasat San Diego, CA

Software Engineer Intern

June 2017 - August 2017

• Collaborated with an interdisciplinary team to consolidate multiple hardware testing tools into a single server rack, automating modem testing processes.

United States Navy

Information Systems Technician

2007 - 2012

- Configured, maintained, and monitored ship-wide local-area network including servers, firewalls, routers, and switches.
- **Supervised** five-member team of diverse backgrounds and life experiences through daily operations by focusing on respect, communication, and motivation.

EDUCATION

University of California San Diego

Jacobs School of Engineering

BS in Computer Science

- Coursework: Object-Oriented Programming; Advanced Data Structures; Theory of Computability; Software Engineering; Computer Architecture; Artificial Intelligence: Search & Reasoning; Computer Operations & Product Engineering
- Organizations: **Vice President** of Student Veterans Organization where I advocated for student veterans and organized events including Raytheon Resume Panel & Networking Event, and Amazon Alexa Hackathon.