

Suneel Freimuth

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Skills

Skill Sets: Full-stack Web Development, Cloud Computing, Operating Systems, Computer Graphics, GPU Programming, Embedded Systems, Robotics, Artificial Intelligence, Machine Learning, Computer Vision, Programming Language Design, Databases, Testing, Concurrency/Parallelism

Software: Linux (Ubuntu, Arch), React.js, Node.js, Cloud Firestore, WebSockets, WebRTC, Tensorflow, Keras, Numpy, Matplotlib, OpenAPI, OpenGL, Nvidia Jetson, Nvidia CUDA, Arduino, Robot Operating System (ROS), CMake

Languages: Javascript, Python, Rust, Golang, C++, C, Java, HTML, CSS, Zig, x86, Verilog, Haskell

Experience

Self-Driving Trucks Senior Design Project • Department of Electrical Engineering and Computer Science, University of California, Irvine

September 2023 - May 2024

- Built 3 self-driving scale model semi trucks with variety of sensors and onboard computers to explore and extend Cyclops architecture developed by [Lee et al. 2022](#)
- Reviewed dozens of research papers on autonomous vehicle control theory, lane detection
- Managed team of 3 fellow students with diverse skill sets and varying experience
- Removed multiple inefficiencies in existing codebase and improved communications architecture between trucks

Oneboard Inc. • [oneboard.live](#) • Chief Technology Officer, Full-Stack Web Developer

August 2020 - September 2022

- Built an online collaborative whiteboard platform for remote education during COVID-19 pandemic serving 1000+ students, educators, and tutors
- Managed and mentored a team of 7 software engineers at various skill levels, leading biweekly Scrum sessions with Jira
- Spearheaded major refactors which increased code quality and enabled sophisticated features such as replaying a user's actions on a whiteboard
- Authored large body of detailed documentation on various board features using Atlassian Confluence, edited and proofread documentation by CEO and other engineers
- Integrated platform with external APIs like Stripe for payment processing and subscription management

Harmony • [harmony.one](#) • Software Engineer Intern

August 2019 - September 2019

- Developed automated test suite for public-facing blockchain explorer API using Postman
 - Collaborated with engineers to produce documentation for the user-facing blockchain explorer
 - Provided tech support to validators in blockchain network during major network outage
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Education

University of California, Irvine • Donald Bren School of Information and Computer Sciences • Computer Science & Engineering Major

Expected Graduation: December 2024

- Coursework in Python, C++, algorithms, data structures, computer networks, computer graphics, embedded systems, computer hardware design with Verilog