Tyler Lentz

Computer Science Student and Team Leader

I am a student team leader at UCSD studying Computer Science, looking to earn a position in software engineering and apply my knowledge from relevant courses and club work.

Skills

Languages (Proficient)	C++, C, Rust, HTML, CSS, JavaScript, Python
Languages (Familiar)	Go, React, Svelte, Java, SQL
Technologies/Tools	Linux, Docker, Git, Github, CMake, PostgreSQL, LaTeX
Miscellaneous	Technical Writing, Communication, Leadership, Agile Software Development

EXPERIENCE

Software Team Lead | Triton UAS

Sept 2020 — June 2021 (member) | June 2021 — Present (lead) La Jolla, CA

- UC San Diego
- Co-leads a subteam of 10+ student members to prepare software for an autonomous plane to compete in the annual SUAS Competition. Primary competition tasks include waypoint navigation and airdrops based on computer vision.
- Placed 5th out of 71 teams in the 2022 competition.
- Co-authored a technical paper which was rated 16th in the 2022 competition
- Delegates tasks, plans out high level software architecture, coordinates with other subteam leads, and fosters a productive working environment.
- Mentors/onboards new members to teach skills necessary to contribute.

CSE Department Tutor | Operating Systems

UC San Diego

- Hired as an official CSE department tutor for an undergraduate operating systems course.
- Duties include holding lab hours to help students understand concepts and programming assignments.

PROJECTS

Ground Control Station | github.com/tritonuas/gcs

- Full-stack web application to monitor and control the mission for an autonomous plane.
- Frontend implemented in with React/HTML/CSS/JavaScript, and backend implemented in Go.
- Served as a both a project lead and individual contributor. Managed workload and task assignment across 3+ people.

Onboard Computer++ | github.com/tritonuas/obcpp

- C++ program to control the second-to-second operations of an autonomous plane
- Functionality includes path planning, camera control, computer vision, target identification via machine learning, and networking between the ground and air.
- Served as a both a project lead and individual contributor. Managed workload and task assignment across 6+ people.

Ectochat | github.com/Tyler-Lentz/ectochat

- LAN-based chatting app, developed in Rust using the Tauri framework with Svelte.
- Utilizes the TCP and UDP protocols to communicate over a LAN.

EDUCATION

BS in Computer Science (GPA of 3.889), UC San Diego

- CSE 190: Working With Large Codebases:
 - Learned tools and techniques to effectively understand and contribute to large codebases.
 - Topics included IDE shortcuts/features, UML diagramming, unit testing, measuring testing coverage, Git/Github, code review, and continuous integration/deployment.
- CSE 110: Software Engineering:
 - Topics included design patterns and agile software development in the context of Java.
 - Applied Agile software development to develop an Android app in a group of six.
- CSE 135: Online Database Analytics Applications
 - Topics included backend web development with an emphasis on data analytics.
 - Configured an Apache web server and developed a full-stack web app with analytics tracking and reports.
- CSE 132A: Database Systems Principles
 - Topics included relational algebra/calculus, relational databases, and SQL in the context of PostgreSQL

September 2020 — Present

January 2024 — March 2024

La Jolla, CA

September 2023 — Present

December 2023 — Present

June 2024 (expected)