# **TROY LU**

Salt Lake City, Utah <u>troylu8@gmail.com</u> (909) 247 0187 <u>troylu.com</u> <u>github.com/troylu8</u>

#### **EDUCATION**

Bachelor of Science – Computer Science The University of Utah, Kahlert School of Computing Anticipated May 2028 GPA: 4.0, Dean's List

#### SELECTED COURSEWORK

Data Structures and Algorithms, Software Practice, Engineering Probability and Statistics, Computer Organization, Models Of Computation

**TECHNICAL SKILLS** – Typescript, React, Git, Rust, Python, SQL, C#, Java, HTML, CSS **AWARDS** – Eagle Scout

#### WORK EXPERIENCE

#### **Software Development Intern**

June 2025 – August 2025

South Coast AQMD – Diamond Bar, California

- Led a project to rewrite a legacy internal website to query 100,000+ total rows of data.
- Collaborated closely with members of other departments for feedback to act upon.
- Fixed fatal issues on processing large data by implementing pagination features.
- Technologies: Python (Flask), .NET Core, MySQL

### **Document Imaging, Data Entry**

September 2024 – April 2025

University of Utah Office of Admissions – Salt Lake City, Utah

- Assist in the management and maintenance of databases of student information.
- Record incoming documents to ensure organization of incoming data.
- Coordinated and communicated efficiently with co-workers and superiors.

### **PROJECTS**

## Online Typing Rhythm Game <u>chuuni-keys.troylu.com</u>

May 2024 – July 2025

- Launched alongside an online platform to share and discover player-made game levels.
- Self-hosted the online platform on an Ubuntu Linux machine with Docker.
- Designed a SQLite database backend to power the online platform.
- Technologies: React, Tauri, Python (Flask), SQL, Docker

### Geospatial Message Board + Chat github.com/troylu8/nearsay December 2024 – May 2025

- Engineered a full stack application: Public message board and chat app over a map of the earth, where users leave notes for others to find and interact with.
- Integrated a caching system to speed up network requests for repeated geospatial areas.
- Incorporated a WebSocket API to efficiently alert users to nearby messages and posts.
- Technologies: NextJS (React), AWS, Typescript, Rust, MongoDB, Redis, WebSocket

#### **CAMPUS ENGAGEMENT**

### **Utah Student Robotics | University of Utah**

**September 2024 – Present** 

• Developed algorithms for autonomous robot navigation to compete in NASA's Lunabotics Challenge.