

Andrew Russell

arussell@ucsd.edu | [linkedin.com/in/andrewrussell](https://www.linkedin.com/in/andrewrussell) | andrewrussell.com | github.com/Cubified

EDUCATION

University of California San Diego

September 2021 – June 2025

B.S., Computer Science

- Overall GPA: 4.00
 - Awards/Honors: Provost Honors, Thurgood Marshall Honors Program inductee, winner of the UCSD Fall 2021 Beginners' Programming Competition, 2022 ICPC competitor
 - On-campus involvement: Vice President Technology of [Triton Software Engineering](#) (formerly Engineering Manager), CSE department tutor/instructional assistant
-

EXPERIENCE

Pennymac, Agoura Hills, CA

June 2023 – August 2023

Software Engineering Intern

- Crafted 4 collectors for telephone logs in Go and Rust, publishing data from telecom REST APIs to a RabbitMQ exchange.
- Devised 12 Logstash pipelines for processing telephone logs and writing to an Amazon DocumentDB.
- Provisioned 5 AWS Lambda functions and 3 Step Functions state machines via CloudFormation and GitLab CI/CD.
- Proposed and implemented a MongoDB schema and Go package for optimized queries on hierarchical data with 5,000 employees.

Trulioo, San Diego, CA

August 2022 – June 2023

Software Engineer Intern

- Engineered a custom data visualization and analytics dashboard to help an identity verification startup monitor the status of its core product REST API, with 4 WebGL-based visualization modes.
 - Constructed a custom 3D globe component with pure WebGL, reducing total network load by 1.5MB when compared to existing solutions.
 - Designed 25 custom CSS/JavaScript animations on trulioo.com as part of a homepage overhaul.
-

PROJECTS

[FixNation Landing Page](#) – **Engineering Manager** | *TypeScript, Svelte*

January 2023 – June 2023

- Spearheaded and directed a team of 10 designers and developers within Triton Software Engineering, culminating in the creation of a tailored landing page for Los Angeles-based spay and neuter clinic.
- Collaborated closely with the non-profit client to adjust designs, minimizing deployment costs by 85%.

[tuibox](#) – **Solo Developer** | *C*

December 2021 – June 2022

- Innovated a terminal UI library for creating interactive command-line software, outperforming older libraries by 15%.
- Garnered recognition with 50 GitHub stars, 6 watchers, and 4 forks in 1 year of development.

[Make-A-Wish Volunteer Hub](#) – **Full-Stack Developer** | *JavaScript, React, Node.js*

December 2021 – May 2022

- Overhauled the San Diego Make-A-Wish volunteer portal, serving 80 employees and over 5,000 annual volunteers.
- Wrote an [interactive calendar component](#) from scratch, reducing overall bundled code size by 200kb.

[neat.ts](#) – **Solo Developer** | *TypeScript*

September 2023 – September 2023

- Developed a NEAT (Neuroevolution of Augmenting Topologies) algorithm implementation in TypeScript for reinforcement learning applications.
 - Successfully applied the NEAT algorithm to train agents in a variety of challenging tasks, including pole balancing, Flappy Bird gameplay, and two-legged walker control.
-

SKILLS

Languages: JavaScript/TypeScript (7 years, 1 in industry), C (6 years, 1 in industry), Java (2 years, academic), x86/ARM Assembly (2 years, 1 academic), C++ (1 year, academic), SystemVerilog (1 year, academic), Go (1 year in industry)

Tools: Git (6 years, 1 in industry), Linux (Debian/Arch/Void/Alpine, 5 years), MongoDB (3 years, 1 in industry), AWS (Lambda/ECS/CloudFormation, 1 year in industry), Docker (1 year in industry), Agile methodology (1 year in industry)