Andrew Russell

Computer Science Student

EDUCATION

University of California San Diego

Sep 2021 - Jun 2024

B.S. Computer Science - San Diego, CA

Major GPA: **4.00**Overall GPA: **4.00**

Awards: Provost Honors, Thurgood Marshall Honors
 Program inductee, winner of the UCSD Fall 2021 Beginners'
 Programming Competition

• Club involvement: Triton Software Engineering

WORK EXPERIENCE

Trulioo

Aug 2022 - Present

Software Engineer Intern - San Diego, CA

- Engineered a data analytics dashboard to help an identity verification startup monitor the status of its REST API.
- Created a custom 3D globe with WebGL to replace an existing solution, reducing JavaScript bundle size by 60%.
- Communicated frequently with a project manager and development team via Slack, 1:1s, and weekly stand-ups.
- Worked with JavaScript (with React and Node.js), C,
 Docker, Git (via GitLab), and AWS Lambda.

Triton Software Engineering

Jun 2022 - Present

Engineering Manager - San Diego, CA

- Coordinated a team of 7 developers to create a React
 Native mobile application for non-profit <u>Y-Stem and Chess</u>.
- **Mitigated conflict among programming pairs** by holding frequent 1:1s with developers.
- Analyzed feasibility of project scope and met with the non-profit client to adjust user flows.
- Reviewed developers' GitHub pull requests and provided code quality feedback on 26.

CSE 30 at UC San Diego

Jun 2022 - Dec 2022

Tutor and Instructional Assistant - San Diego, CA

- Aided students one-on-one in office hours for programming assignments in C and ARM assembly, working with over 100 students in 10 weeks.
- Responded to students on the live Q&A platform Piazza,
 accessing 348 posts in 10 weeks.
- Communicated with course instructors to eliminate inefficiencies in the tutor queue, reducing student wait times by 15 minutes on average.

CONTACT

- · alrussell@ucsd.edu
- · linkedin.com/in/andrewlrussell
- github.com/Cubified

SKILLS

HTML, CSS, JavaScript (+ Node.js): 7 years
C: 7 years
Git: 6 years
Linux Systems (Debian, Arch): 5 years
x86, PowerPC, ARM Assembly: 3 years
Java: 2 years
AWS (S3, Lambda, EC2): 1 year

PROJECTS

Make-A-Wish Volunteer Hub - Node & React

- Overhauled the San Diego Make-A-Wish volunteer portal, serving 80 employees and over 5,000 annual volunteers.
- Wrote a <u>calendar component</u> from scratch, eliminating the need for reductions in project scope.

Projects on Codepen - HTML/CSS/JS

- Devised demo applications of miscellaneous web technologies, creating over 30 projects in 4 years.
- Designed a reactive button component featured on the website's front page, earning 50 likes and 3,300 views.

tuibox - C

 Constructed a single-header terminal UI (TUI) library in C, reaching over 30 Github stars and 100 views in 1 year.

x86http - x86 Assembly

 Wrote an HTTP server in pure x86 Assembly, capable of serving over 5,000 requests per second.

cpu - C

 Designed an assembler and simulator for a custom 8-bit CPU, producing 10 demo projects and games to showcase features.

mode7 - JavaScript

• Implemented a perspective transform effect using the Canvas and Web Worker APIs.

bdfedit - C

• Constructed a bitmap font editor that runs entirely within the terminal.