

Alex Hsieh

626-782-3499 | San Gabriel, CA | ahsie014@ucr.edu | [linkedin.com/in/alex-c-hsieh](https://www.linkedin.com/in/alex-c-hsieh) | github.com/alexchsieh |

EDUCATION

University of California, Riverside

Master of Science in Computer Science

Riverside, CA

Jan. 2023 – Dec. 2024

University of California, Riverside

Bachelor of Science in Computer Science

Riverside, CA

Oct. 2020 – Dec. 2023

EXPERIENCE

Artificial Intelligence Undergraduate Researcher

University of California, Riverside

Jul. 2023 – Present

Riverside, CA

- Implemented human presence detection techniques using C++ on Jetson Nano, enhancing user engagement within the virtual environment.
- Employed OpenCV and Haarcascades libraries for eye tracking and level analysis, optimizing user interface design and overall experience.
- Utilized available avatar behavior models for creating interactive and lifelike virtual interactions, contributing to enhanced user engagement.

Readership

University of California, Riverside

Sep. 2022 – Present

Riverside, CA

- Worked with peers to collectively determine effective grading standards for 3 Computer Science courses.
- Setup efficient lab demo formats to simulate mock industry demos of completed products.
- Helped with grading 20+ lab demos per week and grading 100+ assignments bi-weekly.
- Courses graded: Web Development, Software Construction, and Operating Systems.

Cutie & Citrus Hack – Sponsorship Lead

University of California, Riverside

Aug. 2022 – May. 2023

Riverside, CA

- Served as the line of communication between Citrus Hack and business companies.
- Raised over \$10,000 for both of our Hackathons from several major companies around the world.
- Used our funding for 600+ participants to provide the safest and healthiest experience at our Hackathons.

Association for Computing Machinery – Membership Chair

University of California, Riverside

Feb. 2022 – Mar. 2023

Riverside, CA

- Served as the first line of communication between the Riverside ACM Chapter and the students of UCR.
- Reached out to 100+ companies, professors, and other clubs on campus for collaboration opportunities.
- Helped organize 10+ speakers for club general meetings and workshops.

PROJECTS

User-Defined Custom Compiler | *C, Bison, Flex, Mil, GitHub*

- Developed a custom programming language and implemented a compiler in multiple phases, including lexical analysis, parsing, and code generation.
- Created a lexical analyzer using the flex tool to identify the sequence of tokens in the language's source code.
- Designed and implemented a parser using the bison tool to ensure adherence to the specified grammar of the custom language and generate intermediate code.

News Aggregator | *Vue.js, Firebase, CSS*

- Developed a cutting-edge news aggregator utilizing Vue.js and Firebase, incorporating advanced comment functionality.
- Enabled users to explore diverse perspectives on various topics by presenting two articles with differing viewpoints sourced from a powerful NoSQL database.
- Optimized website loading time by 10% through performance enhancements and efficient data fetching techniques, resulting in improved user experience and reduced bounce rates.

TECHNICAL SKILLS

Languages: C++, Java, JavaScript, Python, C

Skills: HTML/CSS, Vue.js, SQL, Bison, Flex, Mil

Developer Tools: Git, GitHub