Kevin Loritsch

818-862-0614 kloritsch58@gmail.com kevinloritsch.github.io kevinloritsch kevin-loritsch

Education

University of California - Riverside **Riverside, California**

BS in Computer Science, Expected Graduation December 2026 *September 2023 – Present*

- Chancellor's Scholar, 4.00 GPA
- Specialized Coursework: Operating Systems, Parallel Programming, Automata and Formal Languages

Projects and Experience

Computer Science Education Research Assistant **University of California - Riverside**

Research Assistant | Data Analysis *May 2025 – Present*

- Authored abstract and poster presentation analyzing 500+ student-created study sheets to assess impact on learning outcomes and academic performance
- Engineered end-to-end data pipeline using **Python**, **Pandas**, **Matplotlib**, and **Scikit-Learn** to extract, clean, and analyze study behaviors
- Collaborated on research methodology design, defining classification schema for categorizing study materials

Undergraduate Learning Assistant **University of California - Riverside**

Tutor | C++ Instruction *October 2024 – Present*

- Facilitated instruction in foundational **C++** courses through weekly labs and 1:1 tutoring, reinforcing concepts in pointers, data structures, and debugging
- Delivered 12+ hours/week of student support, improving retention and performance for classes of 100+ students
- Enhanced programming proficiency by guiding students through coding assignments and debugging strategies

ACM Spark Project Lead **University of California - Riverside**

Project Lead | Web Development *June 2024 – Present*

- Directed front end development projects, coordinating with on campus organizations to create **FIGMA** designs
- Led teams of 10+ students as Scrum Master, facilitating sprint planning, code reviews, and **AGILE** development
- Delivered production-ready websites using **React**, **Tailwind**, and **HTML**; projects include PTSO, LEAP, and Aviat'R

Natural Language Processing Research Assistant **University of California - Riverside**

Research Assistant | Biomedical NLP *October 2023 – May 2025*

- Annotated clinical text datasets for negation and hedge detection, supporting biomedical NLP model development
- Built analysis scripts in **Python** to compare annotation quality, track progress, and optimize workflow efficiency
- Completed CITI training; contributed to ClinScope corpus development

Data Structures and Algorithms Grader **University of California - Riverside**

Grader | C++ Assessment *October 2024 – Present*

- Evaluated 13+ programming assignments for 500+ students in **C++** data structures and algorithms
- Held weekly office hours to clarify core concepts such as B-Trees, graph theory, and asymptotic analysis
- Managed 5-person dev team building a class learning platform, from Figma prototype to deployment

Parallelized Chess Minimax **Personal Project**

AI Chess Engine | C++, pthreads *November 2024*

- Developed parallelized AI chess engine implementing minimax with alpha-beta pruning
- Optimized performance with **C++** and **pthreads**, achieving 15x runtime improvement over sequential baseline

ACM Vice President of External Affairs **University of California - Riverside**

Student Leadership | Outreach & Mentorship *May 2025 – Present*

- Launched outreach initiatives including weekly tabling, coding workshops, and mentorship programs
- Designed peer mentorship program pairing 25+ first-year students with experienced ACM mentors

Eagle Scout Project **Community Service**

Educational Video Resources | Eagle Scout Awarded *May 2021*

- Directed service project producing educational video resources for local elementary schools
- Bridged digital learning gaps for parents, teachers, and students during COVID-19 remote instruction

Technical Skills

Languages: C++, Python, JavaScript, TypeScript, React, HTML, CSS, SQL, Ruby
Developer Tools: Git, Github, GoogleTest, Github Actions, Figma
Technologies: Next.js, Ruby on Rails, TailwindCSS, Scikit-Learn, Pandas, Matplotlib, pthreads
Management: Scrum, Github Projects, AGILE Development