

# Ryan King

818-720-8283 | [rytking@ucsc.edu](mailto:rytking@ucsc.edu) | [linkedin.com/in/ryan-t-king](https://linkedin.com/in/ryan-t-king) | [github.com/RyantheKing](https://github.com/RyantheKing) | [ryan.familyking.org](https://ryan.familyking.org)

## EDUCATION

<b>University of California, Santa Cruz</b> <i>Master of Science in Natural Language Processing</i>	Santa Clara, CA Sep. 2025 – Present
<b>University of California, Santa Cruz</b> <i>Bachelor of Science in Computer Engineering, Minor in Computer Science — GPA: 3.2</i>	Santa Cruz, CA Sep. 2021 – Jun. 2025
<b>La Cañada High School</b> <i>GPA: 4.2</i>	La Cañada Flintridge, CA Aug. 2017 – Jun. 2021

## EXPERIENCE

<b>Group Tutor</b> <i>UC Santa Cruz, Computer Science and Engineering Department</i>	Sep. 2023 – Present Santa Cruz, CA
• Tutor for CSE121 (Embedded System Design), CSE130 (Principles of Computer Systems Design), CSE13S (Computer Systems and C Programming), CSE40 (Machine Learning Basics: Data Analysis and Empirical Methods), and CSE20 (Beginning Programming in Python)	
• Assists TAs in discussion sections and held office hours	
• Helped 500 students up to 20 hours per week	
<b>Reader/Grader</b> <i>UC Santa Cruz, Computer Science and Engineering Department</i>	Sep. 2022 – Jun. 2025 Santa Cruz, CA
• Course grader for CSE 20 (Beginning Programming in Python)	
• Graded about 100 Python programming assignments per week	
<b>Small Group Instructor</b> <i>iD Tech Camps</i>	May 2022 – Jan. 2023 Remote (Los Angeles)
• I taught week-long coding classes to students between 1st and 12th grade with class sizes of up to 12 students.	
• I taught Python, Java, HTML and JavaScript, C++, C#, AI, and game design tools.	
• Game design tools were RPG Maker, Unity, Roblox, and more basic games using C++, PyGame, and HTML/JS.	

## PROJECTS

<b>EdgeLake Decentralized Video Streaming</b>   <i>WebRTC/aiortc, Python, React, Docker</i>	Jan. 2024 – Jun. 2025
• In a team of 6, we developed from scratch a decentralized multi-stream security camera monitoring service.	
• The stream monitoring software uses EdgeLake, an open-source project within the LF Edge umbrella of the Linux Foundation, created by AnyLog Inc. The code we wrote is a part of AnyLog, the enterprise version of EdgeLake.	
• WebRTC is used to stream potentially dozens of live feeds to a single page with a customizable grid layout.	
• Features include rewinding, recording, AI object detection, and split processing of streams between nodes.	
<b>Datum - AI-powered knowledge base</b>   <i>Next.js, Figma, Firebase, GenKit, Ollama</i>	Sep. 2024 – Dec. 2024
• In a team of 6, I helped develop an AI knowledge base website for companies with many documents.	
• Fully functioning website that allows an admin of a company to create new users and assign them departments.	
• Users can upload documents to a department database and access department files they are privileged to see.	
• Local Llama3.2 model is used instead of OpenAI, so important information is protected, and not used for training	
• The chat tool can summarize a document or have a conversation based on documents a user can access.	
<b>Hand-Tracked Mouse Cursor</b> <i>C#, Python, Android SDK, Android NDK, Unity, Oculus XR, Oculus VR Toolkit, OpenJDK, PyAutoGUI</i>	Feb. 2021 – May 2021
• App for Oculus Quest and PC that uses hand tracking to control a computer mouse without wearing the headset.	
• The Quest mounts behind a chair and relays hand position and gestures to a local Python script on PC via ADB.	
• In addition to clicking, the app on the Quest supports 4 custom gestures including opening an on-screen keyboard.	

## TECHNICAL SKILLS

<b>Languages:</b> Python, Java, C/C++, JavaScript, HTML/CSS, WebGL, MySQL, C#, MatLab, Verilog, RISC-V
<b>Frameworks:</b> Next.js, Vue, React, Node.js, Flask, FastAPI, Jekyll, Arduino, Espressif IoT Development Framework
<b>Developer Tools:</b> Git, Docker, Jest, Firebase, Google APIs, Android SDK & NDK, Unity, OVR Toolkit, Visual Studio
<b>Libraries:</b> PyTorch, WebRTC, OpenCV, Scikit-learn, pandas, PyGame, Selenium, SciPy, discord.py, Three.js
<b>Other Skills/Experience:</b> IoT Development, Linux, FPGA and Logic Design, Robotics, Small System/Network Admin