Angel Arturo Ruiz

(909) 637-8639 | angelruiz47025@gmail.com|LinkedIn | GitHub | angelruiz.info

EDUCATION

University of California Irvine *Class of **2027***

B.S. Computer Science *Irvine, CA*

- **Courses:** Files and Databases, Modern Web Development, Object Oriented Programming, Mobile Operating Systems, Information Retrieval, Data Structures, Algorithms & Analysis, Intro to Machine Learning & A.I

TECHNICAL SKILLS

Languages: C++, Python, Java, JavaScript, HTML, CSS, Assembly
Frameworks/Tools: Git, Docker, Figma, LiveKit, Google Gemini API, Arduino, APIs, React, AWS, Scikit-learn,PyTorch
Databases: SQL, Firebase

RELEVANT EXPERIENCE

N.A.S.A California Space Grant Consortium **May 2023 - Oct. 2023**

MicroComputer & Robotics Intern *Edwards, CA*

- Designed and programmed an Autonomous Lunar Rover using Arduino microcontrollers and multiple sensors
- Developed custom algorithms for rover localization, path planning, and decision making, improving navigation reliability.
- Implemented real-time data logging and telemetry systems for monitoring and debugging.

HackerFab UCI **Jan 2025 - Present**

Software/Hardware Engineer *Irvine, CA*

- Developing a Python-based GUI (PySide6) to control a custom lithography stepper system, enabling real-time interaction with embedded hardware.
- Implementing serial communication (PySerial) between a PC interface and Arduino-based motion controllers.
- Collaborating with a multidisciplinary engineering team to integrate embedded firmware, stepper motor control, and user interface software.

PROJECTS

Multimodal A.I ChatBot | *Project* **Present**

- Built an AI assistant using Google Gemini API capable of real time voice and video interaction
- Integrated web search and weather APIs to enable the assistant to fetch live data and respond dynamically
- **Currently** working on extending my multimodal chatbot into a physical “personal butler” prototype, using a 3D Printer, Arduinos, motors, and sensors to bring AI everywhere I go.

Full Stack Rag Application | *Project* **Apr. 2025**

- Designed and implemented a Retrieval Augmented Generation (RAG) system with FastAPI, Postgres, and OpenAI embeddings.
- Built secure user authentication, document ingestion (upload + chunking), and semantic search with vector embeddings.
- Developed chat endpoints that retrieve relevant context and generate answers with GPT 4o.
- Containerized services with Docker and managed schema migrations using Alembic.

Yelp Review Rating Prediction | *Project* **Oct. 2025**

- Built a multi-class NLP pipeline to predict 1–5 star Yelp ratings from review text using TF-IDF and SBERT embeddings
- Trained and evaluated Logistic Regression, Naive Bayes, and Linear SVM models, addressing class imbalance and overfitting
- Improved performance over majority-class baseline through semantic embeddings and hyperparameter tuning