Kevin Kim

Los Angeles, CA | kimkj@usc.edu | LinkedIn | GitHub | Kaggle

SKILLS

Languages: Python | JavaScript | TypeScript | Java | C++ | Rust (basic)

AI/ML: PyTorch | LangChain | MixtralAI | VertexAI | OpenAI API

Data Analysis: Tableau | MATLAB | Jupyter

Databases: SQL | Supabase | MongoDB | MariaDB | MySQL

Development: React.js | Node.js | Express.js | Flask | SQL

Other Tech Skills: Linux | Docker | Bash | Jupyter Notebook | Zenmap (basic) | UAV Piloting

EDUCATION

University of Southern California **Los Angeles, CA**

Computer Science B.S. | *Applied and Computational Mathematics B.S.* *Expected Graduation Date: December 2025*

❏ SC AI Safety | Undergraduate Association for Linguistics | HackSC | American Association for Computing Machinery

WORK EXPERIENCE

RadicalX **Remote**

AI/ML Engineer Intern *September 2023 - December 2023*

❏ Fine-tuned RadicalX's anti-cheat system using **QLoRA** and **RLHF** resulting in a **4%p increased accuracy**
❏ Engineered the TeachMeBot with Llamma2 LLM and **soft prompting**
❏Collected chat data with **data mining** and trained the **Llama2** model for chat filtering
❏ Developed AI-NPC (non-payable character) models with **Botpress** and **inworld.ai**
❏ Created a systematic approach to my team's workflow using **Google Gen AI Studio**

HackSC **Los Angeles, CA**

Product Engineer| Backend Developer *August 2023 - Present*

❏ Engineered and deployed scalable web platforms used in USC Hackathons using **Node.js, Supabase,** and **React**.
❏ Developed an **automated** judging portal for hackathon events that displays and updated rankings of participants in real-time.
❏ Utilized **Node.js** to extract data from **REST API**, and used **Postman** and **Jest** to validate its functionality comprehensively.
❏Maintained backend integrity through **Supabase** and developed secure endpoints.

Roborisen **Silicon Valley, CA**

AI Engineer Intern *May 2022 - September 2022*

❏ Designed the product manual for the Ping Pong AI Bot© which required extensive understanding in **Image Classification** and competency in **Jupyter Notebook**.
❏ Participated in weekly developer meetings to gain insight on **Transfer Learning** and the product's classification model (**MobileNet** + **KNN**).
❏ Developed a tutorial module for product users, a Rock Paper Scissors game that you can play against the AI.

RESEARCH

Effective LoRA fine tuning on Bloom (Continued work with VeRA) **Los Angeles, CA**

Primary Author
Advisor: *Willie Neiswanger, Ph.D* *September 2023 - Present*

❏ Analyze the effectiveness of LoRa on Bloom using hyper parameter tuning.
❏ Explore various regression methods that minimizes loss while maintaining the same cost.
❏ Continued work on the vector-based random adaptation model

Red Teaming with LLMs **Los Angeles, CA**

Contributing Author | *Researcher*
Advisor: *Joshua Clymer, Owen Yeung, Rokas Gipiškis* *August 2023 - December 2023*

❏ Generated natural adversarial examples (Nadvexes) which could be streamlined into trainable parameters.
❏ Characterized the spaces of natural adversarial examples in the context of a white-box approach.
❏ Explored gradient-free replacement methods for traditional LLM adversarial attacks.

Dining Hall Food Waste Reduction with Yolov3 **Deerfield, MA**

Project Lead | *Primary Author*
Advisor: *Samuel Leitermann-Long, Aiden Carroll* *September 2020 - May 2022*

❏ Engineered a computer vision system that analyzes and predicts food waste per menu in the school dining hall.
❏ Collected 5 TB worth of image data and trained a computer vision model using YOLOv3.

❏ Fine tuned the Yolov3 model with streamlined data over the course of 2 months.
❏ Provided the dining hall with streamlined weekly reports on waste predictions and over/under producible menus.

CERTIFICATIONS / NOTABLE COURSEWORK

Google Machine Learning Engineer Professional Certificate
(Expected Acquisition Date: March, 2024)

Tableau Certified Data Analyst
(Expected Acquisition Date: June, 2024)

USA Coding Olympiad Gold Division Qualifier
January 2023

Data Science with Python (MATH 446, USC)
Fall 2023, Prof. Guillaume Dreyer

NVIDIA Fundamentals of Deep Learning
November 2023