

KAIXIANG (LUCAS) ZHUANG

Bay Area, CA | zhuangk2@uci.edu | [in /lucaszhuang1210](https://www.linkedin.com/in/lucaszhuang1210) | [G /lucaszhuang1210](https://github.com/lucaszhuang1210) | [YT /@lucaszhuang1210](https://www.youtube.com/@lucaszhuang1210)

EDUCATION

University of California, Irvine
B.S. in Computer Science; B.S. in Business Information Management

Expected Graduation Date: June 2026
Senior | GPA: **3.9**

SKILLS

Programming Languages: Python, Java, C++, SQL, JavaScript
Frameworks: AWS Strands, LangChain, CrewAI
Developer Tools: AWS (Lambda, Bedrock, S3, Athena), Docker, Kubernetes, PostgreSQL, MySQL

WORK EXPERIENCE

Research Engineer
Yahoo Finance

June 2025 – Sep. 2025
Mountain View, CA

- Built an LLM-powered AI agent using AWS Bedrock and Strands SDK to perform natural language-driven stock valuation using DCF and public comps methods
- Orchestrated modular ingestion, computation, and agent workflows to support real-time valuation queries across 6,500+ tickers, using custom financial assumptions (WACC, TGR)
- Built secure ETL pipelines to AWS S3 and Athena for structured, auditable access to financial valuation data
- Containerized the system with Docker and deployed via AWS Lambda for scalable, cloud-native execution

Undergraduate Researcher
University of California, Irvine

Sep 2024 – Present
Irvine, CA

- Researched Multi-Agent Path Finding (MAPF) algorithms for robotics and fleet systems, focusing on real-time, decentralized agent coordination under runtime constraints
- Designed hybrid ML + search-based planning algorithms, reduced computational complexity from $O(e^n)$ to $O(n)$
- Proposed and implemented a BFS-based progress indicator to track agent-goal distances and detect livelocks as a planning heuristic

Software Engineer
Insigma Technology

Aug 2023 – Sep 2023
Hangzhou, China

- Boosted credit risk model accuracy by 20%, automated legal regulation updates for policy-aligned retraining
- Applied NLP tokenization and keyword extraction to parse legal documents for downstream model improvement
- Optimized data workflows using Pandas, NumPy, and SQL for efficient feature engineering on financial datasets


LEADERSHIP EXPERIENCE

Vice President
US Overseas Student Union

Oct. 2022 – Present
North America

- Led 25 core team members, expanded membership to 300, and established 27 student chapters reaching over 10,000 international students across North America
- Hosted large-scale events and represented the organization at the Biden–Xi APEC welcome ceremony, gaining national media exposure

PERSONAL PROJECTS

 **AI Researcher Agent** | *LangChain, Pydantic, LLM Orchestration*

- Developed a web-augmented AI agent using retrieval-augmented generation (RAG) to decompose complex queries, perform live search, and generate structured, source-backed answers
- Integrated AWS Bedrock LLMs with LangChain for agent orchestration, tool calling, and multi-step reasoning
- Engineered dynamic prompts and structured output parsing using Pydantic, enabling reproducibility, trace logging, and evaluation across parallel research tasks

RECENT AWARDS

2nd Place – ICS Student Research Symposium (university-wide research showcase) | *UC Irvine*

2025

ICS Honors Program (selective research-focused track for top CS students) | *UC Irvine*

2025

Certificate of Recognition (leadership and community impact) | *California State Assembly*

2023