

William Jiang

330 De Neve Drive, Los Angeles, California 90024

🌐 williamjiang.dev | 📞 (437) 366-3626 | ✉ jiangwil@g.ucla.edu | in [Williamjiang9](#) | 🐙 [Willjianger9](#)

EDUCATION

University of California, Los Angeles (UCLA)

Expected Graduation: June 2027

Bachelor of Science in Computer Science and Engineering

GPA: 3.8

- Coursework: Software Construction, Data Structures, Operating Systems Principles, Computer Architecture

EXPERIENCE

Software Engineering Intern

June 2025 - September 2025

Geotab

Oakville, ON

- Enhanced **.NET**-based installation service with multithreading for **4.7 million vehicles** in global fleet tracking.
- Refactored **C#** backend logic to auto-populate asset data from serial scans to reduce registration errors by **30%**
- Improved the QR-code workflow for **75,000** monthly installations to achieve a **15%** faster average mobile setup time.
- Analyzed installation logs in production using **BigQuery** to resolve bugs for over **55,000** businesses and customers.

Fullstack Software Engineer

September 2024 - December 2024

Swipe-Smart

Los Angeles, CA

- Developed the **SwipeSmart iOS app** to help users maximize cashback rewards by tracking credit card offers.
- Estimated **\$1000/year** in user savings from simulating spending data against category-optimized recommendations.
- Accelerated the user setup process by **45%** by refactoring the data structure for credit card reward categories.
- Improved credit card **UI** and simplified card setup process from **Figma** designs to reduce user setup errors by **25%**.

RESEARCH

Undergraduate Researcher

September 2024 – Present

UCLA Robot Intelligence Laboratory

Los Angeles, CA

- Built a shared autonomy system predicting intent via gaze with **97%** accuracy for **54%** end-to-end task success rate.
- Benchmarked **5 VLMs** on **30** intent tasks to achieve up to **94%** accuracy in translating gaze to multi-step actions.
- Engineered **ArUco**-based **homography** with **nearest-neighbor** mapping to align egocentric gaze to a static view.
- Reduced user interaction time by **50%** compared to the gaze panel baseline to lower cognitive effort and frustration.

Computer Vision Research Assistant

June 2024 – September 2024

Vision and Image Processing Laboratory

Waterloo, ON

- Built automated analytics pipeline for **Stathletes** to extract hockey statistics for **31 leagues** and **34,668 players**.
- Designed a **YOLO** detection and tracking system with **97% accuracy** in identifying players despite occlusions.
- Developed an **extreme gradient boosting** model using features from **150 videos** to evaluate player performance.
- Optimized model generalization by minimizing **RMSE** over **100** boosting rounds to a final validation value of **0.14**.

PROJECTS

BruinBite 🍷 🐙 | *Golang, Python, Bleve, PostgreSQL, Docker, JWT, Next.js*

April - June 2025

- Deployed a campus-wide app to search, review, and rate campus dining hall dishes used by over **100** students.
- Built a fuzzy search system with a **92%** match accuracy on typo-tolerant queries across over **300** dish entries.
- Delivered search results in under **100ms** by using **GIN indexes**, filtering, and query optimizations in **PostgreSQL**.
- Improved image preview using JavaScript File API to cut profile edit time by **60%** without server-side rendering.

Hot Takes 🍷 🐙 | *Next.js, React, TypeScript, MongoDB, Gemini API, TailwindCSS*

March 2025

- Developed a real-time debate platform hosting over **50 AI-moderated** debates for users to share their takes.
- Achieved an **92% accuracy rate** in detecting logical fallacies and misinformation, with a **4% false positive rate**.
- Integrated a rapid-fire mode using **Gemini** to deliver logical counterpoints under **250ms** with concurrent load.
- Implemented a time-decay ranking algorithm by using recency, upvotes, and argument count to recommend content.

Unity Nonprofits 🍷 🐙 | *Next.js, TypeScript, FastAPI, AgentQL, Playwright, nGrok, PerplexityAPI*

January 2025

- Developed a platform connecting users to local nonprofits using zip code and interests to boost social welfare.
- Built a **RESTful API** from Melissa's dataset to search and filter through **1.5 million** relevant nonprofits.
- Used **Perplexity** to extract address, website, and phone/email with a **92%** success rate in retrieving valid profiles.
- Optimized API payloads and web scraping logic to reduce average query time to **3.4s** across **100 integration tests**.

TECHNICAL SKILLS

Languages: C++, C, C#, Python, Java, JavaScript, TypeScript, Swift, HTML/CSS, Go, SQL, Bash, Emacs Lisp, Assembly

Dev Tools: Git, Docker, Kubernetes, Linux, MongoDB, PostgreSQL | **Frameworks:** React, Next.js, Svelte, FastAPI .NET