William Jiang

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Education

University of California, Los Angeles *Expected Graduation Date: June 2028*

Bachelor of Science in Computer Science and Engineering

- Recipient of Medtronic and Ontario Hockey Federation Scholarship
- Relevant Coursework: Intro to C++ Programming, Data Structures and Algorithms, Software Construction
- GPA: 3.9

Experience

Fullstack Developer September 2024 - December 2024

Creative Labs *Los Angeles, CA*

- Developed the **SwipeSmart iOS app** to help users **maximize** cashback rewards by tracking credit card offers.
- Redesigned the **data structure** for **credit card reward categories** to support **unique colors and icons** and integrated updates into the app using **data-passing**.
- Improved development with **continuous integration** to resolve bugs and **enhance app performance**.
- Integrated designer-created views into the application for a **seamless, visually cohesive user experience**.

Lead Website Developer December 2024 - Present

UCLA Robot Intelligence Laboratory *Los Angeles, CA*

- Designed and launched the **official website** with an responsive interface to showcase research projects.
- Leveraged **HTML**, **CSS**, and **JavaScript** to create dynamic, cross-browser compatible web pages.
- Engineered responsive animations with engaging UI/UX elements and smooth animations.
- Integrated version control using **Git** and created deployment workflows to streamline updates and maintenance.

Multimedia Designer April 2021 – October 2023

Youtube *Remote*

- Produced and edited **40+ videos**, achieving over **140,000 views** on YouTube by creating edits and tutorials.
- Implemented **search engine optimization** strategies, to generate over **1.2 million** video impressions
- Developed and refined video content strategies to increase **audience retention** and grew channel visibility.

Research

Undergraduate Researcher September 2024 – Present

UCLA Robot Intelligence Laboratory *Los Angeles, CA*

- Extracted 3D gaze coordinates from Meta's **Aria glasses** to track movements from a **mobile** ego perspective.
- Engineered a **homography-based solution** to align gaze data to and a **robot-mounted camera**.
- Improved robot **policy learning** by incorporating **human visual attention** to adapt behavior during tasks.

Undergraduate Research Intern December 2024 – Present

Interconnected & Integrated Bioelectronics Laboratory *Los Angeles, CA*

- Contributed to development of a **ferrobotic platform** for **automated viral detection** in clinical samples.
- Developed **machine learning models** to predict diseases from biomarkers using colorimetric RT-LAMP assays.
- Evaluated machine learning models to determine **performance** in **multi-class disease classification.**

Computer Vision Research Assistant July 2024 – August 2024

University of Waterloo, Vision and Image Processing Laboratory *Waterloo, ON*

- Annotated **100+** hockey games of footage to develop a robust dataset for training machine learning models.
- Designed a **YOLO**-based object detection and tracking system to track player movements with **97% accuracy**.
- Developed an **extreme gradient boosting** algorithm using **150+** videos to evaluate performance evaluation.
- Utilized **homography techniques** to map player positions and warp visualized data to original footage.
- Integrated **SAM2** to automate player mask creation to create precise overlay of masks on visualized data.

Technical Skills

Languages: C++, Java, Python, JavaScript, HTML/CSS, Swift | **Design**: Figma, Adobe Illustrator, Photoshop
Developer Tools: Git, VS Code | **Libraries**: PyTorch, TensorFlow, Keras, OpenCV, NumPy, Pandas, Matplotlib