

JOHN CONNELL

☎ 925-375-4071 ✉ johnconnellcs@gmail.com 🏠 Los Angeles, CA 🔗 [linkedin.com/in/john-connell-cs](https://www.linkedin.com/in/john-connell-cs) 🐙 github.com/JohnConnellCS

Education

University of California, Los Angeles (UCLA)

June 2026

B.S. in Computer Science

GPA: 3.9/4.0

Relevant Coursework: Intro to CS in C++, Data Structures and Algorithms, Neural Networks & Deep Learning, Software Construction, Computer Architecture, Operating Systems Principles, Computer Networks, Linear Algebra

Activities: Microsoft Student Ambassador, LA Hacks Organizer, UPE (Computing Honors Society) Mentorship Chair

Technical Skills

Languages: C++, Python, JavaScript, Assembly (x86-64, MIPS), C, Java

Frameworks and Libraries: React, Node.js, Flutter, Tailwind CSS, Next.js, Flask, PyTorch

Tools/Technologies: OpenMP, HTML, CSS, Git, Jira, Bitbucket, GDB, Firebase, AWS, Docker, Linux, Bash, Xcode

Technical Experience

Software Engineer Fellow

Dec. 2024 – Jan. 2025

Palantir Technologies

Los Angeles, CA; Online

- Increased UGV (Unmanned Ground Vehicle) path safety by **32%** through hazard-aware routing developed in **Python**
- Automated UGV task assignment and management through a dashboard created with **Python** and Palantir's **AIP**

Software Engineer Intern

Sept. 2024 – Mar. 2025

Postcard

Los Angeles, CA

- Grew engagement by **220%** in Q1 2025 through the development of in-app messaging with **Flutter** and **Firebase**
- Developed social media platform with **50+** active users, leveraging user data and feedback to enhance the product
- Built alongside Google and Meta Engineers, steering long-term product vision through data insights and user feedback

Software Developer, Research Assistant

Nov 2023 – Sept. 2024

Sensing and Robotics for Infrastructure Lab (SRI)

Los Angeles, CA

- Recognized by the City of LA for creating applications used to prevent wildfire damage and guide city planning efforts
- Developed Cost Analysis Tool projected to influence **\$70M+** in LA street damage restoration spending in the next year by implementing cost-benefit algorithms, building a **React**-based front-end, and collaborating with city engineers
- Created an Accessibility Tool that located **500+** homes at increased fire risk using Mapbox GL with **JavaScript** to make interactive visualizations that detail streets lacking sufficient evacuation paths for residents and emergency personnel
- Reduced deployment time by over **50%** through the use of **Docker** containers deployed on **AWS Elastic Beanstalk**

Projects

Deep Learning Models for EMG-Based Character Prediction | *Python, PyTorch, NumPy*

Mar. 2025

- Built sEMG signal classification models using CNN+LSTM (**72.36%** accuracy) and Transformer+CNN (**61.3%**)
- Organized team of **4**, ensuring timely architecture implementation and sufficient testing despite compute limitations
- Optimized CNN model implementation, testing batch normalization, sEMG band rotations, and hyperparameter tuning

The Duck Method — TreeHacks 2025 Best Use of ElevenLabs | *Next.js, React, Firebase, OpenAI API*

Feb. 2025

- Integrated **ElevenLabs** technology to enable real-time conversation with a curious duck that users teach any subject
- Leveraged **OpenAI API** and **Mistral AI API** to generate scores and feedback built on relevance and correctness
- Optimized multimodal learning with **Zoom API** to create in-app meetings and promote peer-to-peer communication

DocuDoc — IrinveHacks 2025 Healthcare Track Winner | *React Native, Firebase, Flask, Python*

Jan. 2025

- Reduced expected patient negligence by **35%** through AI-powered recordings, summaries, and next steps of visits
- Leveraged **Accessibility API** and **HuggingFace** models trained on patient-doctor interactions to enhance feedback
- Awarded Patient Safety Award for the project that best demonstrates the potential to transform the patient experience

UCLAX | *HTML/CSS, JavaScript, React, Node.js, MongoDB*

June 2024

- Collaborated with a team of **6** to create full-stack application for UCLA students to split ride-hailing app fees
- Created a user feed that maintains **500+** ride-split posts and built **6** filters using **React**, **Express**, and **MongoDB**
- Designed a responsive home page and Sign-Up page that supports **50+** accounts using **React** and **Tailwind CSS**
- Constructed a friend request feature using **React** and **MongoDB**, allowing users to connect with frequent partners