

# LUKE SELL

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## EDUCATION

**University of California, Los Angeles (UCLA), Los Angeles, CA**

Expected June 2027

*BS - Electrical Engineering*

- UCLA Ski Team, IEEE at UCLA, Sigma Phi Epsilon Fraternity (VP of Programming).
- Coursework: Digital Signal Processing, Computer Organization, Circuits Laboratory, Data Mining, Machine Learning.

## SKILLS

Software: Python, C/C++, TypeScript, React, AWS Infrastructure, Machine Learning, AI Agents.

Hardware: Lab Equipment, Soldering, Embedded Systems, Circuit Design.

Soft Skills: Communication, Teamwork, Leadership, Public Speaking, Organization.

## INTERNSHIPS

**AIVideo.com** | *Software Engineering Intern*

June 2025 - August 2025

- Automated 60% of support emails with an LLM agent, reducing response time and deflecting volume with seamless escalation.
- Cut hallucinations from 30%→2% via prompt ops (auto few-shot, 1-click rule extraction, iterative system prompt refinement).
- Deployed the agent as a serverless stack on AWS Lambda + API Gateway with CloudWatch monitoring and AWS CDK (IaC).
- Prototyped Image Studio, a chat-based generative photo editor with user-scoped Firestore+S3 storage and version control.
- Operated as a full-stack engineer, leading product/UX decisions and delivering end-to-end features with strong observability.

**Runa Digital Assets** | *Intern*

June 2024 - August 2024

- Programmed analytics tools in SQL and Python to extract insights on liquidity providers from Orca blockchain data.
- Produced detailed research reports on DePIN projects, exploring investment opportunities and updates on existing positions.

**Capella Space Corporation** | *Radar Test Intern*

June 2022 - August 2022

- Upgraded ground calibrator, including sensor interface, timekeeping instrument, GUI, and data-processing software.
- Designed and constructed Stratum-1 NTP server, enabling crucial time-keeping with a consistent accuracy of up to 20ns.
- Utilized oscilloscopes and multimeters to troubleshoot hardware, validate firmware functionality, and construct new circuits.
- Utilized I2C, soldering, and embedded programming to implement new sensor interface and error-detection algorithm.
- Implemented efficient computing techniques and multithreaded programming to improve user interface and data-logging.
- Created documentation detailing components of the instrument and a user walkthrough to guide further improvement.

## PROJECTS

**Elegant Mind Club** | *TERESA Project Member*

January 2025 - May 2025

- Developing a VR-controlled, remote robotic surgery system by mapping controller movements to a robotic arm.
- Rewrote open-source C++ robotic arm firmware to support serial port communication, added servos, and improved mobility.
- Optimized code for real-time performance, reducing upload time by over 50% and increasing execution speed by over 300%.

**Pocket Racers** | *Team Member*

October 2024 - May 2025

- Implemented computer vision for an autonomous Raspberry Pi-powered car using NumPy and OpenCV, optimizing for racing.
- Trained and fine-tuned a convolutional neural network to enable real-time decision-making for autonomous navigation.
- Integrated motor control algorithms with sensor feedback to ensure precise speed and steering adjustments during races.

## LEADERSHIP & INVOLVEMENT

**Blockchain at UCLA** | *Vice President*

September 2024 - Present

- Facilitated collaborations between students and faculty to promote blockchain research and experiential learning.
- Organized speaker presentations and panel discussions to explore emerging blockchain trends and applications.

**UCLA Engineering Ambassadors** | *Ambassador*

April 2025 - Present

- Acted as a representative for the engineering school by participating in networking events and giving tours.

**Sigma Phi Epsilon Fraternity, California Omicron** | *Vice President of Programming*

May 2024 - June 2025

- Managed an annual budget of more than \$100,000 to ensure the execution of social, philanthropic, and alumni events.
- Managed a diverse executive board including risk officer, philanthropy chair, and rush chair to run a chapter of 100+ members.
- Trained successor and onboarded new executive board members to ensure continuity and long-term success.