

Kevin Davidson

kevin@kevindavidson.work | [LinkedIn](#) | [GitHub](#) | [Website](#) | [Hugging Face](#)

EDUCATION

University of California, Irvine **Jun. 2028**
B.S. in Applied and Computational Mathematics (Data Science Concentration)

Santa Monica College **Jun. 2026**
GPA: 3.7/4.0 | Honors Program Member | IEEE Computer Society Member

TECHNICAL SKILLS

Languages: C++17, Python (AI/ML), JavaScript (React), Bash

Developer Tools: YOLOv8, Hailo-8L NPU, Linux (Debian/Ubuntu), Edge Computing, PyTorch (Model Training)

Software and Frameworks: React.js, Git/GitHub Actions, Vercel

Web & Design: Figma, Framer, Adobe Creative Suite (Illustrator, Photoshop), CAD

PROFESSIONAL EXPERIENCE

Stocker (Fintech AI Startup) **May 2026 - Present**

Machine Learning Engineer

- Developing data pipelines and RAG infrastructure for an AI-powered financial research platform.
- Architected SEC EDGAR ingestion systems with semantic chunking for data preprocessing, streamlining institutional investment analysis workflows.

Santa Monica College | Santa Monica, CA **Sep. 2025 - Dec. 2025**

Supplemental Instruction Leader/ Teaching Assistant

- **Directed peer-to-peer instruction for a 120-student Data Structures (C++) course**, focusing on complex memory management, pointers, and OOP paradigms.
- **Debugged 50+ student C++ programs weekly** using VS Code to resolve memory leaks and segmentation faults.
- Integrated **CI/CD workflows** into the curriculum, teaching **GitHub Actions** for automated testing.

RESEARCH & PROJECTS

TALOS: Open-Source Bicycle Safety System

- **Achieved 26x inference speedup (3 to 80+ FPS)** by migrating the vision pipeline to a **Hailo-8L NPU**, enabling real-time blind-spot monitoring on a Raspberry Pi 5.
- **Increased motorcycle class recall by 41%** by fine-tuning YOLOv8 on a custom dataset with class oversampling and published versioned models to Hugging Face.
- **Built a threat-isolation algorithm** based on **Tau Theory (Time-to-Collision)** to filter background noise and calculate time-to-collision, **reducing false-positive alerts on stationary vehicles** for high-speed transit safety.

Apollo: Full-Stack Campus Resource Application | React.js, Python

- Streamlined campus navigation and study-room discovery by architecting a **live interactive SVG map** in React.js that visualizes real-time room occupancy for **250+ students monthly** at apollo.kevindavidson.work.
- Engineered a **Python ETL pipeline** to scrape and sanitize unstructured Oracle APEX schedules, converting **1700+ records** into optimized JSON for sub-second client-side rendering through **GitHub Actions**.

LEADERSHIP EXPERIENCE

HackSMC | Santa Monica, CA **Jan. 2026 - Apr. 2026**

Outreach and Sponsorship Lead

- Directed external communications and strategic outreach for a regional hackathon, **leading a 5-person team** to secure **\$16k** in corporate sponsorships, university grants, and prizes by developing a tiered sponsorship system and pitching to companies.

Future in Tech at SMC | Santa Monica, CA **Aug. 2025 - Jun. 2026**

Co-Founder and Vice President

- Established a technical student community to connect curriculum and industry, scaling membership to **80+ active members** through weekly workshops on AI, cloud architectures, and career development.

Obscura Design | Los Angeles, CA **Oct. 2020 - Present**

Founder and Product Designer

- Product Designer for **30+ B2B UI/UX clients**, securing recurring design contracts with **5+ core partners**.

AWARDS & HONORS

- 1st Place, SMC STEM Poster Symposium 2026
- 2nd Place, CCSC Southwest 2026
- Helset Scholar Finalist, **Stanford** Bay Honors Symposium 2026
- Honorable Mention, IEEE SusTech 2026
- Finalist, SMC Global Citizenship Symposium 2026