

# Kevin Davidson

(310) 633-1932 | kdavidson639@gmail.com | [LinkedIn](#) | [GitHub](#) | [Website](#) | [Hugging Face](#)

## EDUCATION

---

### Santa Monica College | Santa Monica, CA

June 2026

**AS-T in Mathematics, Pursuing transfer to a 4-year institution for Applied Mathematics / GPA: 3.8/4.0**

- **Courses:** Data Structures in C++, C++ Programming, C Programming, Java Programming, Calculus 1-3, Differential Equations, Linear Algebra
- **Honors:** Dean's List

## TECHNICAL SKILLS

---

**Languages (ordered by proficiency):** C++, Python, C, Java, HTML

**Tools and Frameworks:** Hugging Face, Git/Github, Linux (SSH), Adobe Photoshop and Illustrator, Microsoft Excel, Microsoft Office Suite, Google Workspace, Figma, Framer, CAD

## RELEVANT EXPERIENCE

---

### Santa Monica College | Santa Monica, CA

Sep. 2025 - Dec. 2025

*Supplemental Instruction Leader*

- Selected to lead peer-to-peer instruction for a **100+** person Data Structures (C++) course.
- Host 2x weekly office hours to debug C++ code and teach complex topics (e.g., pointers, recursion, OOP).
- Manage an online support forum and collaborate with the professor to ensure content alignment.

### Obscura Design | Los Angeles, CA

Oct. 2020 - Present

*Founder and Lead Graphic Designer*

- Designed the complete user interface (**UI**) wireframe and final mock-up for a B2B SaaS company's website.
- Created and delivered digital marketing assets, product packaging, and visual ads for freelance clients.
- Commissioned for **over 30** unique poster designs, managing client communication from concept to final delivery.

## PROJECTS

---

### TALOS: Computer Vision Bicycle Safety System | Personal Project

- Developed "TALOS," an open-source bicycle safety system on Raspberry Pi 5, integrating a custom YOLOv8 computer vision pipeline with a CAD-designed 4-part mounting chassis for real-time blind-spot monitoring.
- Engineered a custom dataset by implementing class merging and oversampling techniques, fine-tuning YOLOv8n to increase minority-class (motorcycle) recall by 41% and publishing versioned models to Hugging Face.
- Orchestrated edge deployment via Python and SSH, optimizing the inference loop for low-latency performance on embedded hardware while managing iterative hardware prototyping.

### Tic-Tac-Toe v2 | Personal Project

- Implemented an unbeatable AI opponent by designing a complete game tree using a vector of nodes **in C++**.
- Engineered the Minimax algorithm using recursive depth-first search to evaluate 100% of possible game states, guaranteeing a mathematically perfect strategy.

### Towers of Hanoi | Personal Project

- Implemented a **recursive solution in C++** to solve the classic Towers of Hanoi puzzle.
- Created a graphic interface and prompted users to customize the puzzle.

### Custom PC Builder | Personal Project

- Researched, sourced, and assembled multiple high-performance PCs from components, ensuring hardware compatibility and optimizing for performance.
- Installed and configured operating systems and drivers, troubleshooting all hardware/software conflicts.

## LEADERSHIP EXPERIENCE

---

### Future in Tech at SMC | Santa Monica, CA

Aug. 2025 - Present

*Co-Vice President*

- Co-manage club operations, helping organize technical workshops and industry guest speaker events.

### Fresh Brothers | Beverly Hills, CA

Jun. 2023 - Nov. 2024

*Team Member*

- Assisted in training new employees and resolving customer issues, demonstrating leadership in a fast-paced team.