



Danh Tran

(714) 837 - 5323 | danhtraann@gmail.com | 16678 Mt. Cachuma Cir. FV

CAREER PROFILE

Electromechanical engineering student aspiring to specialize in mechatronics. Experienced in hands-on projects integrating mechanical, electrical, and software systems. Strong leadership background in team-based engineering and technical problem-solving. Seeking an engineering internship to apply skills in circuit design, prototyping, and embedded systems.

EDUCATION

California State Polytechnic University, Pomona, Pomona, CA

August 2025 - Present

Electromechanical Systems Engineer B.S. Freshman

- GPA: 4.0/4.0
- Planned Coursework: Electrical Networks, Instrumentation & Control, Robotics Control & Applications, Applied Statics & Dynamics, Strength of Materials, Machine Elements, Thermodynamics, Fluid Mechanics, Manufacturing Systems, C/C++ Programming

EXPERIENCE

Teaching | *Tutoring, Lesson Planning, Communication, Curriculum Design*

August 2021 - May 2025

Co-Teacher, Tutor, Teacher Assistant

Westminster & Santa Ana, CA

- Tutored ~8 middle school students daily; supported ~80 students over 4 years
- Co-taught digital design for nuns in Vietnam, bridging English/Vietnamese communication
- Led confirmation classes and retreats for 20+ high school students

CyberPatriot | *Linux, Bash Scripting, Networking, Cybersecurity, Leadership*

September 2023 - Present

Coach

Westminster, CA

- Mentored 9 teams (~54 students) national CyberPatriot competition
- Scripted ~2k lines of Bash for Linux hardening and security automation
- Coached teams to Top 100 National Platinum Tier (twice) and grew placements by 200%

PROJECTS

Go-Kart Engineering Project | *Physics/Mechanics, Wiring, Altium PCB Design, Team Leadership*

August 2024 - July 2025

Team Leader

- Engineered a go-kart from a repurposed bed frame; reached 15 mph in testing
- Managed ~\$1.2k budget and 3-member team for design, fabrication, and testing
- Applied torque/friction analysis, drivetrain troubleshooting, and electrical wiring

Pickleball Launcher Project | *Raspberry Pi, Circuits, Python, 3D Printing, Motor Control*

February 2025 - Present

Engineering Intern (informal)

- Guided by a professional engineer to apply mechanical/electrical design principles
- Designing a motorized ball launcher with capstan drive mechanics
- Implementing H-bridge motor control and Python-based motion calibration
- Integrating 3D-printed parts with electronics for testing and iteration

Jukebox | *Raspberry Pi, Python, GPIO Wiring, Embedded Systems*

February 2025 - Present

Solo Developer

- Built a functioning Raspberry Pi music player with custom circuit wiring
- Programmed GPIO button controls for audio playback
- Strengthened embedded systems and hardware-software integration skills

SKILLS

Engineering & Technical Tools: *Circuit Design, PCB Design (Altium), 3D Printing, Mechanical Prototyping, SolidWorks CAD, Raspberry Pi, Arduino, Embedded Systems*

Programming & Software: *Python, Bash, C++, Java, HTML/CSS, JavaScript, OpenGL, Git/GitHub*

Certifications: *Virtual Intern Simulation @ Johnson & Johnson Medtech, State Seal of Civic Engagement, Seal of Biliteracy, Computer Science & Cyber Security CTE Pathway*