

DUY NGUYEN

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EDUCATION

University of California, Los Angeles

September 2024 – June 2027

Electrical Engineering

Los Angeles, CA

- GPA: 3.45/4.00 — Relevant Coursework: Signal Processing, Circuit Analysis, Data Structures & Algorithms

De Anza College

September 2022 – June 2024

Electrical Engineering

Cupertino, CA

- GPA: 4.00/4.00 — Relevant Coursework: Computer Architecture, Object Oriented Programming

AWARDS

Internet Research Initiative Scholarship

June 2025

UCLA Connection Lab

\$7,500

- Awarded for independent research on self-regulated learning and large language models under the UCLA Internet Research Initiative.

UCLA College Wilson Teacher-Preparation Endowed Scholarship

June 2025

UCLA College of Letters and Science

\$5,500

- Recognized for excellence in math and science education and commitment to teacher preparation through UCLA's Math-Ed and Science-Ed pathways.

UCLA Samueli Engineering Scholarship Supplement

June 2025

UCLA Samueli School of Engineering

\$1,500

- Awarded by the UCLA Samueli School of Engineering for academic excellence and contributions to the engineering community.

Mr. and Mrs. Benton Bejach Undergraduate Scholarship

September 2024

UCLA Samueli School of Engineering

\$5,000

- Awarded to one junior Electrical Engineering student demonstrating strong academic performance and community impact.

EXPERIENCE

IRI Undergraduate Researcher

June 2025 – Present

Internet Research Initiative, UCLA Connection Lab

Los Angeles, CA

- Designing and leading an independent research study titled “*Scaffolding Student Learning via Large Language Models and Self-Regulated Learning Theory*” to investigate how AI-assisted feedback can enhance student self-regulation and learning outcomes.
- Developing IRB protocol, experimental design, and data analysis framework to compare traditional large language model usage with SRL-assisted LLM scaffolding among UCLA Computer Science students.
- Serving as Principal Investigator under faculty mentorship, coordinating study logistics, ethics approval, and future publication efforts through the UCLA Connection Lab.

STEW Workshop Coordinator

April – June 2025, 2026

Southeast Asian Coalition, Student Transfer Experience Weekend (STEW)

Los Angeles, CA

- Developed and led an original workshop for UCLA's Student Transfer Experience Weekend, guiding 30+ students per session on strategies for building personal coaching networks and leveraging campus resources.
- Collaborated with the STEW planning committee over a 3-month period to design, present, and refine workshop materials through iterative feedback and biweekly planning meetings.

- Delivered engaging presentations emphasizing informational interviews, mentorship, and holistic success across academics, career development, health, and community involvement.

HOPE Mentor

September 2024 – Present

Higher Opportunity Program for Education

Los Angeles, CA

- Provided individualized one-on-one support to remedial students at Gilbert High School, fostering confidence and a passion for lifelong learning despite socioeconomic challenges.
- Mentored high school students from underserved communities, guiding them toward academic success and career aspirations in trade schools and vocational pathways such as welding, automotive mechanics, construction certifications, and aviation programs.
- Led two shadow days and a community tour for high school students, introducing them to college life and local STEM opportunities while fostering a sense of belonging and aspiration.

Math 73XP Internship

January 2025 – March 2025

CalTeach

Los Angeles, CA

- Assisted teaching 6th graders Math 6, Pre-Algebra at New West Charter School, helping students build a strong mathematical foundation and self confidence to succeed.
- Helped engage students in mathematical content by applying research-based teaching pedagogies, incorporating Stanford's dimensional engagement framework to connect concepts to students' interests, real-world applications, and collaborative problem-solving.

Project Coordinator

January 2024 – September 2024

Foothill Robotics Club

Los Altos, CA

- Guided students in mastering modern developer tools, including Git for version control, Unix for efficient system operations, and Docker for containerized software deployment, equipping community college students with industry-ready skills.
- Mentored students in implementing and troubleshooting the Duckietown Robot project, integrating machine learning, computer vision, and autonomous navigation concepts to enhance hands-on learning.

Team Manager

May 2023 – September 2023

Crema Coffee Roasting Company

San Jose, CA

- Fostered community engagement by organizing canvassing events and fundraisers, including collaborations with notable political figures such as San Jose Mayor Matt Mahan and former Vice Mayor/District 9 candidate Madison Nguyen.
- Led daily operations in a high-volume café, ensuring smooth workflows by managing staff schedules and resolving interpersonal conflicts.
- Cultivated a welcoming and inclusive environment for staff and customers, building strong relationships with a diverse community while hiring, on-boarding, and mentoring new employees.

Object-Oriented Paradigm Instructor

June 2021 – July 2021

Path to Learn Education

San Jose, CA

- Designed and delivered a comprehensive curriculum introducing Middle and High School students to the fundamentals of Object-Oriented Programming.
- Led a virtual classroom of 24 students via Zoom during COVID-19, ensuring a structured learning environment through collaborative activities.
- Administered midterms and finals, managed a gradebook, and provided timely feedback to ensure students stayed on track and met learning objectives.

Lead Instructor

June 2019 – July 2019

theCodeMatrix

San Jose, CA

- Directed a class of 40 elementary school students, strategically organizing them into groups of six to ensure personalized, one-on-one mentorship opportunities with assistant mentors.
- Inspired a passion for computer science by delivering an enriching curriculum that emphasized problem-solving, teamwork, and innovation through a collaborative capstone project to build their own websites.

PROJECTS

PID Controlled Microcontroller Project | C++, *Micro-controllers* September 2024 - December 2024

- Developed and implemented PID Algorithm to navigate obstacle course for ECE 02
- Data for PID Algorithm recorded and set future examples for ECE 02 Course

Electromyography Controlled Prosthetic Arm | C++, *Micro-controllers* January 2024 - July 2024

- Prototyped at a engineering hackathon and won 2nd place
- Continued as a research project and won the "Viewers Award Choice" at the "Research & Service Leadership Symposium" at Foothill College

RateMyProfessors.help | Go, Python, ReactJS, PostgreSQL, Jenkins, OpenBSD July 2022 - January 2023

- Developed a full stack web application to sort ratings of professors for specified courses.
- Collected data on 965 unique courses from colleges through web scraping and API data.
- Implemented a RESTful API with Go's httprouter to serve cached data from a PostgreSQL Database.
- Managed and hardened server applications through creating, documenting, and deploying UNIX services.
- Deployed a continuous integration and development pipeline to seamlessly deliver updates to end users.

6502 Breadboard Computer | Assembly, Logic Design, *Micro-controllers* August 2022 - December 2022

- Assembled a computer using breadboards with the 6502 microprocessor, 555 timer clock, and various ICs.
- Interfaced with integrated circuits such as the AT28C256 EEPROM, VIA, and SRAM to implement IO.
- Utilised the Arduino Mega 2560 micro-controller for developing and debugging the 6502 computer.
- Contributed towards documenting the build process for OpenBSD's Arduino AVR MCU Programmer.

Writer-Ups.com | POSIX Script, HTML/CSS/Javascript, OpenBSD January 2022 - December 2022

- Created a custom static website generator using POSIX sh to create step by step solutions to physics problems.
- Supported converting and rendering LATEX from Markdown into HTML for visualizing physics solutions.

Pico-Audio Controller | MicroPython, C/C++, *Micro-controllers* August 2025 - August 2025

- Developed and assembled a physical audio player with the use of a Raspberry Pico micro-controller.

Pico-Pomodoro | MicroPython, C/C++, *Micro-controllers* August 2022 - December 2022

- Developed and assembled a physical Pomodoro timer with the use of a Raspberry Pico micro-controller.
- Documented Python, C/C++ Toolchain, and Developer Tools for the Raspberry Pi Pico on OpenBSD.

Neuron-MI | Python, Tensorflow, Flask API, Apache2, Linux January 2020

- Developed a RESTful API with Flask to serve, process, and detect cases of pneumonia using Machine Learning.
- Collaborated to create a Tensorflow model using a data set of X-ray scans during a 24-hour hackathon.

TECHNICAL SKILLS

Languages: Java, Go/Golang, Python, Assembly, POSIX Scripting, C++, C, SQL, HTML/CSS, Javascript

Deployment: Virtualization, Docker, Kubernetes, OpenBSD, Linux, FreeBSD, Jenkins, httpd/apache2, relayd

Technologies: Data structures, TCP/IP, Logic Design, 6502 Microprocessor, Micro-controllers, 3D Printing