Dhilan Patel

U.S. Citizen

EDUCATION

09/2022 - Present

University of California, Davis - Davis, CA

- Bachelor of Science | Double major Electrical and Computer Engineering
- Expected Graduation June 2026 | UC GPA: 3.57
- Relevant Coursework: Circuits II, Computer Architecture, Digital Systems, Signals and Systems, Electromagnetics I, Device Physics I, Probability & Statistics

EXPERIENCE

10/2024 - Present

Terahertz Laser Senior Design Project, UC Davis ECE Laboratory

- Using a Terahertz laser system to test the properties of metamaterials
- Working on an embedded system which will maintain the automated instrumentation calibration system, which will be used to take over 10,000 tests per material.

04/2024 - Present

Control Systems Winery Intern, UC Davis Department of Viticulture & Enology

- Upgrading and maintaining the fermentation control systems that collect temperature and Brix data to automate vessel modifications.
- Operating and designing automation of a Raman Spectroscopy unit to evaluate the concentration of specific headspace gasses.

04/2024 - 06/2024

Al Powered Spotify DJ, Embedded Systems Final Project - Davis, CA

 Used a TI CC3200 to poll ChatGPT via AWS for information about a song and display it alongside spotify user status on an OLED.

01/2024 - 06/2024

Undergraduate Student Researcher, UC Davis Pavement Research Center

- Calibrated, disassembled, and rewired machines used for the fabrication and examination of pavement specimens.
- Responsible for creating and using lab checklists based on government (AASHTO) SOPs

08/2022 - 01/2024

Propulsion Subteam Member, UC Davis Oneloop - Davis, CA

Used ANSYS tools to test mathematical factors of a Linear Induction
Motor that moved a train from eddy currents and electromagnetic forces.

SKILLS

- C++
- Java
- MATLAB
- Verilog-HDL
- RISC-V Assembly

- Analog Circuit Design
- Power Supply
- Oscilloscope
- Multimeter
- Embedded Systems
- SPI, UART, I2C
- SPICE Simulation
- ANSYS Slwave Simulation
- Forklift Certified
- FPGAs