

Tarun Rajesh

tarunrajesh.1130@gmail.com — Los Angeles, CA — (510) 427-9580

TOPICS OF INTEREST

Electrical engineering; embedded systems and robotics; circuit design and power electronics; human-centered AI applications; hardware prototyping

EDUCATION

University of California, Los Angeles — B.S. Electrical Engineering Expected 2030

Coursework: Circuit Analysis, Digital Logic Design, Multivariable Calculus, Linear Algebra

Dublin High School, Dublin, CA Class of 2026

GPA: 4.39 (W), 3.98 (UW)

Las Positas College — Dual Enrollment

GPA: 4.0; CIS 50 Introduction to Computing Information Technology; MATH 3 Multivariable Calculus

LEADERSHIP & ACTIVITIES

Student Climate Corps — Founder & President 2022 – Present

- Led zero-waste resolution adopted by Fremont and Dublin USDs; advanced district implementation planning with stakeholders
- Partnered with nonprofits and government agencies to transition 700,000+ meals to reusables, preventing 42,000 lbs of plastic waste

Dublin High School Greenspace — Lead Volunteer 2022 – Present

- Co-built off-grid greenhouse systems: solar routing, battery/automation logic, and sensor networks for temp/soil/light
- Enabled irrigation, aquaponics, and class research; trained four students to maintain and expand the project

Dublin HS Speech & Debate Club — Debate Captain 2022 – Present

- Competed in Varsity Parliamentary Debate at state and national tournaments
- Piloted a 6-week intro program preparing 45 novice students; served as PFSO liaison for funding and recognition

Dublin USD Budget Committee — Student Representative 2023 – 2025

- Nominated by an Assistant Superintendent; advised on enrollment stagnation and the end of one-time pandemic funds
- Advocated equity priorities including PBIS, restorative justice, and sustained investment in lab technicians

FIRST Tech Challenge Team 16481 RoboRacers — Business Lead 2023 – 2025

- Built Monte Carlo Localization module and supported coding/strategy to improve autonomous navigation reliability
- Raised \$32,000 in sponsorships and grants; led outreach across three countries reaching 75 youth

WORK / INTERNSHIP

Center for Environmental Health — Intern Jul 2024 – Sep 2024

- Authored a national youth guide on zero-waste policy; supported California student coalitions with science-to-policy translation
- Reviewed draft resolutions and contributed model language for the Ditching Disposables 2.0 toolkit

PROGRAMS

Aspiring Scholars Directed Research Program — Student Researcher 2024 – Present

- Designed and evaluated LLM-based virtual patient simulations for patient–physician interactions; manuscript in preparation
- Presented at the 2025 IEEE Integrated STEM Education Conference at Princeton University

California Youth Climate Policy Program — Mentor 2025 – Present

- Mentoring three students through policy design, drafting, feedback cycles, and district-level advocacy capstones

AWARDS

- Top 6 Semifinalist, CA State Board of Education Student Board Member Selection
- National Merit Scholarship Competition Semifinalist
- AP Capstone Diploma
- Control Award (First Place), FIRST Tech Challenge NorCal State Championship
- Think Award (First Place), FIRST Tech Challenge NorCal State Championship
- Dublin Engineering and Design Academy (DEDA) Entrepreneurship Competition: First Place Showcase (2025); Ember Award (2025); Cybersecurity Award (2025); Green Innovation Award (2024)
- StopWaste Environmental Leadership Award