

**EDUCATION & AWARDS****UC Berkeley | College of Engineering**

Electrical Engineering &amp; Computer Sciences (EECS)

Expected Graduation May 2029

GPA: 3.85 | ACT: 36

**Awards:** ISEF Finalist (2023 & 2025) • ICDC Finalist (2025) • National STEM Champion (2024) • FIRST Dean's List Finalist (2024) • FTC World Finalist (2022 Winning Alliance, 2024 & 2025 Finalist) • National Invention Convention Best of Show—Transportation (2024) • Congressional App Challenge Winner, FL-19 (2023)

**PROFESSIONAL EXPERIENCE****Lee County Department of Transportation | Infrastructure & Traffic Operations****Jan 2024 – Aug 2024**

Engineering Intern

Fort Myers, FL

- Supported county engineers in improving signal operations and road safety through applied research.
- Contributed to distracted-driver detection pilot using computer vision; analyzed data for accuracy and reliability.
- Delivered findings to DOT leadership, shaping next-phase planning for urban infrastructure upgrades.

**WebValley Research | Bruno Kessler Foundation international AI fellowship****Jun 2024 – Jul 2024**

Research Fellow

Trento, Italy

- Analyzed CSES-01 satellite data to study ionospheric patterns tied to seismic and space weather events.
- Developed predictive ML models for anomaly detection and reproducibility.
- Collaborated with 20 international students and researchers; co-presented findings to FBK & INFN scientists.

**Congressional App Challenge | National software development competition****Aug 2023 – Feb 2024**

District Winner (FL-19)

Fort Myers, FL

- Designed AID app to connect volunteers and disaster victims in real time after Hurricane Ian.
- Presented prototype to FEMA supervisors and Congressman Byron Donalds; incorporated user feedback.

**Transcend Traffic | Independent innovation project on AI-driven urban mobility****Aug 2023 – Present**

Founder &amp; Lead Researcher

Fort Myers, FL

- Created SPSA multiagent system that reduced simulated traffic delays by 78% in 24-hour extreme tests.
- Built distracted-driver detection model (83% accuracy) and prototyped smart road studs with 9x visibility range.
- Patent Pending (Utility Patent filed, 2024); presented recommendations to municipal and industry stakeholders.

**LEADERSHIP EXPERIENCE****FIRST Tech Challenge — Java the Hutts | Competitive robotics team****Jul 2019 – May 2025**

Team Captain &amp; Lead Programmer

Fort Myers, FL

- Directed 12-member team to win FTC World Championship; earned Inspire & Innovate Awards (top awards).
- Designed autonomous navigation & vision systems, improving match performance by 30%.
- Organized outreach workshops impacting 500+ students; secured over \$10,000 in funding & sponsorships.

**Project Ken | Assistive technology initiative for ALS patient****Aug 2024 – Jun 2025**

Vice-President

Fort Myers, FL

- Built voice-controlled robotic arm with custom kinematics to allow mobility for an ALS patient.
- Led design iterations and testing with the patient, refining motion range and comfort based on feedback.

**India Association, Youth Wing | Cultural nonprofit promoting Indian heritage****Jul 2024 – Jun 2025**

Vice-President

Fort Myers, FL

- Led youth programs to preserve Indian culture for second-generation immigrants.
- Organized cultural festivals & mentorship events engaging 200+ families.
- Fostered belonging by blending American & Indian traditions.

**STEM Outreach & Advocacy | SASA, Title I schools, international mentorship****Aug 2020 – Present**

Director &amp; Volunteer

Global/Remote

- Founded STEM club at Title I school, teaching robotics to 50+ middle-schoolers per term.
- Mentored robotics teams internationally; advised on portfolio & engineering design.
- Advocated for STEM funding at state and national level for the Chips & Science Act.

**SKILLS & INTERESTS**

- **Skills:** Python, Java, OpenCV, MATLAB, CAD (Fusion 360/Solidworks), Arduino/ESP32, Project Management
- **Interests:** Pickleball (4.5 DUPR, working toward 5.0), Taekwondo (3rd Degree Black Belt), Origami
- **Languages:** English (native), Hindi (conversational)