

EDUCATION & AWARDS

UC Berkeley | College of Engineering Expected Graduation May 2029
Electrical Engineering & Computer Sciences (EECS) **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 & Lead Researcher Fort Myers, FL

- Created SPSSA 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 9× 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 & 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 & 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)