

Scotty Tehrani

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PROFESSIONAL SUMMARY

Highly skilled autonomous vehicle researcher with a focus on advanced materials and systems integration. Has successfully developed cutting-edge materials and performance-enhancing algorithms while managing project budgets and securing critical industry funding. Leadership and mentorship skills have consistently guided cross-functional teams to achieve key research objectives.

EDUCATION

University of California, Riverside (UCR)

Ph.D., Electrical Engineering

June 2025

Areas of Expertise: Intelligent autonomous vehicles, climate impact on power systems

University of XXXXX, Tehran, Iran

M.S., Electrical Engineering

June 2020

University of XXXXX, Tehran, Iran

B.S., Mechanical Engineering

Jun 2018

TECHNICAL SKILLS

Solid Works, AutoCAD, Nano Pattern Generation System (NPGS), COMSOL, JMP; Nanosphere lithography, wet/dry etching, E-beam/optical lithography

PROFESSIONAL EXPERIENCE

Multi-Laboratory Autonomous Vehicle Research Study, UCR Department of Engineering

Team Lead

May 2023 – Present

- Lead and organize a team of 8 engineering faculty and postdoctoral researchers 5 research laboratories
- Identify laboratory equipment needs and balanced a budget of \$12,000 purchasing supplies and instruments quarterly
- Collaborate with colleagues to develop 3 peer-reviewed publications, conferences presentations and successful grant proposals
- Manage the integration of research findings from diverse subfields including computer vision, machine learning, and sensor technology
- Develop and maintain partnerships with industry sponsors, securing an additional \$50,000 in funding
- Represent the research group at national conferences, presenting findings and networking with potential collaborators

TechDrive Innovations, San Francisco, CA

Autonomous Vehicle Intern

June 2024 - August 2024

- Researched advanced materials for lightweight, durable sensor housings
- Tested various polymer composites to optimize weather resistance for exterior components
- Evaluated heat-dissipating materials to enhance performance of onboard computing systems
- Developed prototypes for impact-resistant casings for LIDAR and camera systems
- Analyzed data from material fatigue tests to improve long-term durability of vehicle parts

- Collaborated with cross-functional teams to integrate new materials into existing designs

Department of Electrical Engineering, UCR

Senior Research Associate

September 2021 – May 2023

- Collected and analyzed electrically gated graphene-on-diamond devices and compared them with graphene-on-oxide devices
- Synthesized thermal interface materials using graphene filler and reported findings in a 20 page technical report
- Secured grant funding and oversaw budget costs for 2 research projects

STARTUP Company, Madrid, Spain

Electrical Design Engineer Intern

June 2020– August 2020

- Analyzed electrical data to study stress/strain on transistor performance and compact modeling
- Worked with a team of 4 lab engineers to create test structures on materials characterization
- Presented project findings at the 2018 Texas Instruments annual conference to an audience of 50 participants

LEADERSHIP EXPERIENCE

Graduate Student Association (GSA), UCR

Vice President, Memberships

January 2023 – Present

- Manage editing and production of GSA's website and redesigned user interface
- Collaborate with GSA President in facilitating monthly board council meetings consisting of 85 members and organized virtual meetings

PROFESSIONAL MEMBERSHIPS

Member, Institute of Electrical and Electronics Engineers

October 2021– Present

Member, American Association for the Advancement of Science

October 2021 – December 2023

Member, Association for Computing Machinery (ACM)

January 2021 – December 2022

PUBLICATIONS (1 out of 6) & PRESENTATIONS (1 out of 4)

Tehrani, S. and XXXX, E. Materials Characterization. Journal of New Technology. (In Press)

Tehrani, S. and XXXXXXX, J. Intelligent Autonomous Vehicles. Poster presentation delivered virtually at the Institute of Electrical and Electronics Engineers (IEEE) Conference, October, 2023

OTHER SKILLS

Microsoft Word, PowerPoint, Excel, SPSS, LaTeX; Trilingual in English, Spanish and Farsi