Everett Richards

ehrichards9@gmail.com · (858) 899-5834
linkedin.com/in/everett-richards · github.com/EverettRichards · everettrichards.com

Objective

Short Term: Research internship in applied computer vision, robotics, or intelligent systems.
Medium Term: A PhD in Computer Science or Data Science.
Long Term: A full-time industry research position in applied machine learning.

Education

San Diego State University — San Diego, CA
BS Computer Science & BS Applied Mathematics, 4.0 GPA — Aug 2023 – May 2027 (expected)

Research Experience

Research Fellow, 3D Perception for Autonomous Vehicles — May – Aug 2025
Worcester Polytechnic Institute – VIS Lab, Prof. Ziming Zhang — Worcester, MA

- Developing a collaborative 3D computer vision framework.

Research Fellow, Imitation Learning for Robotics — Sept 2024 – June 2025
University of California San Diego – Prof. Hao Su — San Diego, CA

- Conducted experiments on the impact of Gaussian noise injection in robotic imitation learning models
- Optimized a sigmoid approximation curve relating noise amplitude to performance, yielding statistically significant R^2 values between 0.91 and 0.99
- Used Pandas, NumPy, MatPlotLib, and SciPy for data analysis and optimization
- Used MuJoCo, RoboSuite, RoboMimic, and MimicGen for robotic simulation and imitation learning

Research Fellow, Computer Vision for Autonomous Vehicles — June – Aug 2024
University of Delaware – IES Lab, Prof. Lena Mashayekhy — Newark, DE

- Developed and validated two algorithms improving object detection accuracy in autonomous vehicles
- Integrated PiCamera2, Paho-MQTT, and TensorFlow for video processing and edge networking
- Achieved up to 70% accuracy improvement over legacy methods, validated on a four-robot testbed
- Paper accepted for publication at IEEE EDGE 2025 in Helsinki, Finland

Research Assistant, Applied Robotics and Data Analytics — Dec 2023 – May 2024
San Diego State University – DiCE Lab, Prof. Reza Akhavian — San Diego, CA

- Built a 3D simulation model with Lua for visualizing motion capture data from construction sites
- Developed a Python tool to automate annotation for 10+ hours of training footage
- Utilized TensorFlow, PyTorch, Scikit-Learn, and OpenCV for machine learning and computer vision tasks

Publications and Presentations

Published Papers

- **E. Richards**, B. Thapa, and L. Mashayekhy, "Edge-Enabled Collaborative Object Detection for Real-Time Multi-Vehicle Perception," 2025 IEEE International Conference on Edge Computing and Communications (EDGE), Helsinki, Finland, 2025.

Poster Presentations

- **E. Richards**, "Edge-Enabled Collaborative Object Detection for Connected Autonomous Vehicles". Poster presented at the University of Delaware Symposium for Undergraduate Research and Creative Activity, Newark, DE, 2024.

Leadership Experience

Vice Chair, CTRL @ SDSU May 2025 – Present
Coalition of Tech Representatives and Leadership (CTRL) at SDSU

- Serve on a board of leaders from various Computer Science student organizations at SDSU
- Represent CTRL at CS faculty and Industrial Advisory Board meetings

AS Representative May 2025 – Present
Associated Students of San Diego State University (AS SDSU)

- Represent the College of Sciences on the University Council and certain University Senate committees

President, ACM @ SDSU Apr 2024 – Present
Association for Computing Machinery (ACM) Student Chapter at SDSU

- Secured $2,500 sponsorship from Google to fund events and initiatives
- Presented 10+ workshops on topics like machine learning, web development, and version control
- Hosted the "Innovate 4 SDSU" Hackathon in April 2025, in which 60+ students competed to develop apps that improve student life at SDSU

CSSC Representative Aug – Dec 2024
SDSU College of Sciences Student Council (CSSC)

- Oversaw financial appropriations, community service, and events within the College of Sciences

Instructional Experience

Tutor, Mathematics & Computer Science Aug 2024 – May 2025
SDSU Math and Science Learning Center (MSLC) San Diego, CA

- Tutored students in computer science (Java, Python, data structures, algorithms), mathematics (calculus, discrete math, real analysis), and physics
- Participated in professional development workshops to enhance tutoring skills

Instructional Assistant, Discrete Mathematics Jan 2024 – May 2025
SDSU Dept. of Mathematics and Statistics – Prof. Vadim Ponomarenko San Diego, CA

- Led weekly office hours for 6–8 students, covering proof techniques, recursion, and boolean algebra
- Developed and discussed weekly focus exercises to reinforce key topics

Awards and Honors

Academic Awards:

- Cert. of Excellence in Advanced Programming Languages, World Computing Organization (2025)
- Dean's List, SDSU College of Sciences (2023–2025)
- AP Scholar with Distinction, College Board (2023)
- National Merit Commended Scholar (2022)

Scholarships:

- George A. Hansen Scholarship (2025)
- Deloitte Foundation Scholarship (2024)
- Mensa Foundation Scholarship (2024)
- North Island Credit Union Scholarship (2023)
- Intuit STEM Scholarship (2023)

Skills and Strengths

Technical Skills:

- Deep learning with TensorFlow, Keras, PyTorch, OpenCV
- Data analysis with NumPy, Pandas, MatPlotLib, and Scikit-learn
- Computer vision, including CNNs & deep learning
- Computer networking and edge computing
- Theoretical and applied mathematics

Professional Skills:

- Research, literature review, and technical writing
- Public speaking and presentations
- Leadership and organizational management
- Tutoring and mentoring
- Drafting LaTeX documents
- Publishing papers in reputable journals