

DEVON TAO

+1-774-407-4798 | detao@ucsd.edu | devontao.github.io/devonthescientist

La Jolla, CA - 92092, USA

EDUCATION

- **University of California, San Diego** September 2025 - Present
PhD in Data Science
◦ GPA: 4.0
La Jolla, CA
- **Harvey Mudd College** May 2025
BS in Computer Science and Mathematics
◦ GPA: 3.96
Claremont, CA

RESEARCH EXPERIENCE

- **Statistical Quality Control of Package Data** September 2024 - Present
Clinic Team Member, Clinic Team Lead starting January 2025, FedEx
◦ Applied statistical quality control methods to analysis of anomalous package delivery data
- **Trajectory Anomaly Detection of Flight Data** May 2024 - August 2024
Student Research Intern, MIT Lincoln Lab
◦ Implemented, evaluated, visualized, and compared trajectory anomaly detection algorithms on FAA flight data
- **Braitenberg Vehicle Simulator** September 2021 - May 2022, December 2023 - November 2024
Student Researcher, Harvey Mudd College 
◦ Designed and implemented web simulator of the book *Vehicles: Experiments in Synthetic Psychology* by Valentino Braitenberg
◦ Designed, administered, and analyzed mix-methods survey assessing educational efficacy and enjoyment of simulator
- **Fitness Landscape Analysis of a Cell-based Neural Architecture Search Space** May 2024 - August 2024
Student Researcher, Harvey Mudd College 
◦ Analyzed and visualized fitness landscape analysis metrics when applied to the cell-based Neural Architecture Search space NATS-Bench

PUBLICATIONS

C=CONFERENCE

- [C.1] Devon Tao and Lucas Bang. (2024). **Fitness Landscape Analysis of a Cell-Based Neural Architecture Search Space**. In *Proceedings of the 1st International Conference on Explainable AI for Neural and Symbolic Methods*, pp. 77-86. SciTePress. 2024, Porto, Portugal. DOI: 10.5220/0012892400003886
- [C.2] Devon Tao and Lucas Bang. (2024). **Braitenberg Vehicle Simulator: Visualizing the Classic Thought Experiment**. In *2024 Artificial Intelligence x Humanities, Education, and Art (AIxHEART)*, pp. 77-86. IEEE. 2024, Laguna Hills, CA, USA. DOI: 10.1109/AIxHeart62327.2024.00013

TEACHING EXPERIENCE

- **University of California, San Diego** September 2022-September 2024
Teaching Assistant
La Jolla, CA
◦ Courses: DSC40A Theoretical Foundations of Data Science I (introduction to machine learning), DSC40B Theoretical Foundations of Data Science II (data structures and algorithms)
◦ For DSC40A: created new homeworks and discussion materials
- **Harvey Mudd College** September 2022-September 2024
Grader/Tutor
Claremont, CA
◦ Courses: Intro to CS, Data Structures, Information Theory, Machine Learning, and Programming Languages
◦ Created KIND (Knowledge, Initiative, Non-judgment, Dependability) framework for tutoring and ran tutor trainings
- **CS Professor of Fun** December 2023-May 2025
YouTube Channel
◦ Scripted, visualized, and edited educational computer science videos for the undergraduate level

HONORS AND AWARDS

- **Class of '94 Award** May 2025
Harvey Mudd College
 - Awarded to one senior for outstanding coursework, research, and service in the computer science department
- **William and Margaret Radley Prize** May 2025
Harvey Mudd College
 - Awarded to one senior for excellence in the humanities, social sciences, and arts
- **Dorman Student Altruism Prize** May 2025
Harvey Mudd College
 - Peer-nominated award; awarded to one senior who has “done the most for their fellow students”

SKILLS

- **Programming Languages:** Python, R, Javascript, Java, C++, Haskell, HTML, CSS
- **Web Tools:** p5.js, Angular, React, Node.js, Spring Boot
- **Data Science Tools:** NumPy, Pandas, Matplotlib, scikit-learn, PySpark
- **Databases:** MongoDB, PostgreSQL

LEADERSHIP EXPERIENCE

- **Co-founder and co-president** March 2022-March 2025
Aro and Ace Space
 - Founded affinity group for asexual and aromantic spectrum students at the Claremont Colleges
 - Hosted weekly dinners, monthly community-building events, organized educational outreach initiatives

REFERENCES

1. **Deepak Kumar**
Assistant Professor, Computer Science
University of California, San Diego
Email: kumarde@ucsd.edu
Relationship: PhD advisor
2. **Lucas Bang**
Associate Professor, Computer Science
Harvey Mudd College
Email: bang@cs.hmc.edu
Relationship: Undergraduate advisor