

DEVON TAO

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EDUCATION

Harvey Mudd College, Claremont, CA
B.S., Computer Science and Mathematics

Expected 05/25
4.0 GPA

RELEVANT COURSEWORK

Data Structures; Algorithms; Programming Languages; Computability and Logic; Probability & Statistics; Engineering Systems; Differential Equations; Linear Algebra; Discrete Mathematics; Single & Multivariable Calculus

SKILLS

Programming Languages: Python, R, Javascript, Java, C++, Haskell, HTML, CSS

Libraries & Frameworks: NumPy, Pandas, Matplotlib, scikit-learn, p5.js, React, Angular, Node.js, Spring Boot

Databases: MongoDB, PostgreSQL

Languages: Mandarin (advanced), Spanish (Intermediate)

EXPERIENCE

AI & Algorithms Student Researcher, MIT Lincoln Laboratory, Lexington, MA 05/24-Present

- Conduct self-directed literature review of traditional and deep learning outlier detection methods
- Write report on outlier detection algorithms, design considerations, and technologies
- **Security Clearance:** Secret

HCI Student Researcher, Harvey Mudd College, Claremont, CA 09/21-5/22, 12/23-Present

- Used p5.js to create simulator of philosophy book for educational purposes; simulator used by 60+ students
- Designed and administered survey assessing educational efficacy and enjoyment of simulator
- Performed quantitative and qualitative analysis of survey results and drafted an academic manuscript

Machine Learning Student Researcher, Harvey Mudd College, Claremont, CA 05/22-Present

- Read about Neural Architecture Search (NAS) algorithms and search spaces
- Applied concepts from evolutionary biology to an analysis of a popular NAS search space
- Analyzed results and visualize data using Matplotlib and draft an academic manuscript

Computer Science Department Grader/Tutor, Harvey Mudd College, Claremont, CA 08/22-Present

- **Classes TA'ed:** Intro CS, Data Structures, Information Theory, Machine Learning, Programming Languages
- Read code and proofs for correctness and clarity
- Coordinate with instructor to organize other graders/tutors for the course

Engineering Intern, Allstate Protection Plans, Remote 06/23-08/23

- Used Angular and Spring Boot to create a dynamically generated form UI based on JSON Schema, replacing the need to write boilerplate code
- Automated the warranty registration system, replacing manual data entry

MANUSCRIPTS

Under Review

Devon Tao and Lucas Bang. "Fitness Landscape Analysis of a Cell-based Neural Architecture Search Space."

In Progress

Devon Tao and Lucas Bang. "Braitenberg Vehicle Simulator: Visualizing the Classic Thought Experiment."

AWARDS

Honorable Mention, COMAP's Interdisciplinary Contest in Modeling 05/23

- For the submission "Light Pollution: A Glaring Problem"

Harvey Mudd First-Year Platt Prize 09/22

- Awarded to one first-year student who demonstrates excellence in academics and community