Tomas Dos Santos

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23706 Waterleaf Circle · Moreno Valley, California 92557

Skills: Python · PyTorch · Scikit-Learn · TensorFlow · Pandas · SQL · JavaScript · React · Django · LaTeX

EXPERIENCE

Environmental Health and Safety Specialist   **Mar 2024 - Jun 2024**

UCR Environmental Health and Safety

- Participated in the assessment of 80 storm drain system facilities for maintenance,
- Collected, organized, and maintained environmental health and safety data for the UCR campus.
- Ensured compliance with Construction Site Runoff control program.

Research Assistant/Co-Author   **May 2022 - Present**

Mathematical Principles in Physics

- Used mathematics background to co-author a textbook on the mathematical principles of physics with Dr. Bipin Desai.
- Actively drafted over 220 pages of text, ensuring accurate portrayal of quantum mechanics and mathematical modeling principles in LaTeX.
- Diligently prepared and reviewed manuscripts set for publication in 2025.

Undergraduate Researcher   **Dec 2023 - Jun 2024**

Probability Theory

- Created numerical methods for calculating geodesic distances using Python, gaining skills in mathematical modeling and data analysis.
- Employed Monte Carlo techniques of evaluating probability using NumPy to boost efficiency.
- Analyzed the memory and time demands of scaling geodesic numerical analysis
- Presented my findings to a committee of professors as well as other undergraduate students.

PROJECTS

Math Research

Python, NumPy

Developed Python-based numerical methods for calculating distances on manifolds. [↗]

Income Prediction

TensorFlow, Scikit-Learn

Using data science tactics to predict an individual's income based on demographic features. [↗]

Language Model

PyTorch

Developed a language model using PyTorch, trained on my LaTeX university assignments. [↗]

CLUBS & LEADERSHIP

Vice President and Co-Founder

AI Student Collective

- Co-Founder of the first Artificial Intelligence club at UCR and raised to 100+ members.
- Organized a talk with a keynote speaker from Microsoft on the evolving landscape of AI.
- Led workshops on machine learning and data science projects.

Vice President of Learning Community

Sigma Phi Epsilon

- Played a pivotol role in receiving UCR Chapter of the Year and Highest GPA Awards 2022-2023.
- Raised cumulative Chapter GPA from 2.93 to 3.18 by hosting tutoring for fraternity members.
- Delegate for 2023 Sigep Grand Chapter Conclave voting and shaping the future Bylaws for the fraternity.

EDUCATION

University of California, Riverside   **Sept 2022 - Jun 2024**

Bachelor of Science in Mathematics · GPA: 3.77

Chancellor's List Sept 2022 - March 2024