Andrew Taylor

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EDUCATION

University of California, Berkeley ***Expected Graduation May 2027***
Junior – Intended Data Science B.A. + Intended Computer Science B.A. (3.71 GPA)

TECHNICAL SKILLS / COURSEWORK

Languages and Technologies: Python, Java, C# (Unity), Git, SQL, Tableau, PyTorch
Relevant Coursework: **Principles and Techniques of Data Science** (Python, Pandas, NumPy, Seaborn, Sklearn, SQL) • **Data Structures & Algorithms** (Java, Git) • **Deep Learning for Visual Data** (PyTorch)

EXPERIENCE

UC Berkeley Course Staff - Foundations of Data Science (DATA 8) ***August 2024 - Present***
Undergraduate Student Instructor (TA) - **January 2025 - Present**

- Teach a weekly 2-hour lab section of 42 students, reinforcing data science concepts and debugging code.
- Provide individualized support on assignments and projects, utilizing a mastery of technologies and techniques such as **Python, NumPy, A/B testing, MLR, bootstrapping, and k-nearest neighbors.**
- Contribute to the pedagogy team by reviewing and refining discussion worksheets, homework assignments, and lab notebooks.

Undergraduate Tutor (Data Foundations Scholars Program) - **August 2024 - December 2024**

- Designed and led interactive weekly sessions for 10-15 students, covering fundamental data science concepts, programming basics, statistical analysis, and data visualization.

Ten Strands - Data Initiative for Climate Action in California's TK–12 Schools ***June 2024 - September 2024***
Summer Research Intern

- **Developed Python programs** in Jupyter Notebook to **process, clean, and analyze datasets** for **900+** California school districts, integrating climate model projections (high-heat, wildfire, sea-level rise) over the next 40 years.
- **Developed a scalable climate risk analysis system**, calculating individualized climate risks for all 58 California counties and 936 school districts, identifying over **5 million students and 9,000 campuses at risk**.
- **Designed and deployed interactive data visualizations in Tableau**, enabling administrative leaders to assess climate risk through intuitive maps and analytics dashboards.
- **Co-authored a white paper** to be published and presented at the Green CA Schools and Higher Education Summit, translating data insights into actionable policy recommendations.

Bay Area Environmentally Aware Consulting Network (BEACN) ***September 2023 - May 2024***
Associate Consultant

Union of Concerned Scientists - National Environmental Policy Act Compliance Project (Spring 2024)

- **Developed a machine learning pipeline** using OpenAI's API in Google Colab to parse federal documents and perform **linear regression analysis**, assessing the impact of project factors on NEPA compliance timelines.
- **Conducted exploratory data analysis (EDA)** on federal agency reports and infrastructure project timelines, producing **data-driven visualizations** to evaluate NEPA's influence on federal decision-making.

AC Transit - Clean Corridors Plan Project (Fall 2023)

- **Performed statistical and geographic analysis** of U.S. census tracts, air quality trends, income demographics, and ecological factors to assess AC Transit's **2020 Clean Corridors Plan (impacting 50,000+ riders)**.
- **Formulated multiple strategies** to prioritize when and where zero-emission buses are deployed, considering environmental justice, infrastructure costs, and storage constraints.
- **Presented findings to AC Transit's Board of Directors**, integrating data insights into actionable policy recommendations.

Sponsored Projects for Undergraduate Research (SPUR) - Watersheds of the East Bay ***February 2024 - May 2024***
Undergraduate Researcher

- Conducted **data-driven archival research** on East Bay watersheds, collecting and analyzing ecological and historical records from museums, libraries, and government databases.
- Collaborated with UC Berkeley faculty and Wholly H2O to integrate **geospatial data** into watershed story maps for the East Bay "Walking Waterhoods" tours program.