Andrew Taylor

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EDUCATION

University of California, Berkeley ***Expected Graduation May 2027***
Sophomore – Intended Data Science B.A. + Society and The Environment B.S. (3.914 GPA)

TECHNICAL SKILLS

Java, Python, PyTorch, Pandas, Tableau, SQL, C# (Beginner), Data Visualization, Exploratory Data Analysis

EXPERIENCE

UC Berkeley Data Foundations Scholars Program Course Staff ***August 2024 - Present***
Undergraduate Tutor, Data 8 (Foundations of Data Science)

- Design and teach interactive sessions for groups of 10-15 students, discussing core data science concepts, including programming basics, statistical analysis, and data visualization.
- Provide individualized guidance on assignments and projects, deepening student understanding of Python (NumPy, Pandas), analytical problem-solving, and probability concepts.

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

- Developed Python program within Jupyter Notebook to process, clean, and analyze datasets covering 900+ California school districts, integrating statistics from climate models on high-heat, wildfire, and sea-level rise projections over the next 40 years.
- Designed and implemented a system to calculate individualized climate risks for all 58 California counties and 936 school districts and aggregated the total number of campuses and students affected by varying levels of climate risk, identifying over 5 million students and 9,000 campuses at risk.
- Designed and deployed interactive, data-driven visualizations using Tableau, enabling administrative leaders to effectively understand and plan for climate change through easy-to-understand maps and graphs.
- Co-authored a white paper to be published and presented at the Green CA Schools and Higher Education Summit.

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

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

- Utilized OpenAI's API in a Google Colab Notebook, parsed federal documents, and performed a linear regression analysis to assess how various external and internal project factors influenced NEPA compliance timelines.
- Developed comprehensive data visualizations from an exploratory analysis of federal agency reports, data, and infrastructure project timelines to evaluate NEPA's influence on the federal decision-making processes.

AC Transit - Clean Corridors Plan Project (Fall 2023)

- Conducted a detailed quantitative and qualitative analysis of U.S. census tracts, air quality trends, income demographics, and ecological factors to evaluate the environmental impacts of AC Transit's 2020 Clean Corridors Plan, serving over 50,000 riders.
- Formulated strategic recommendations for prioritizing routes for new zero-emission buses, taking into account environmental justice, infrastructure costs, and storage capabilities, which were presented to AC Transit's board of directors.

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

- In association with UC Berkeley faculty, collaborated with the non-profit Wholly H2O to investigate the history and environmental justice issues of East Bay watersheds, focusing on oral histories and California BIPOC narratives.
- Performed archival research at various museums and libraries to gather historical and ecological data on local creeks, contributing to the creation of watershed story maps for the East Bay "Walking Waterhoods" tours program.