

Kathryn Nguyen

+1 650-670-0843 | kathrynnguyen@berkeley.edu | [LinkedIn](#) | [GitHub](#)



PROFILE

UC Berkeley student passionate about utilizing Data Science, AI, and GIS mapping tools to tackle complex challenges across various domains. Proficient in geospatial analysis, data visualization, and predictive modeling to analyze patterns and trends. Dedicated to leveraging these skills to contribute to research projects aimed at solving real-world problems.

EDUCATION

University of California, Berkeley

Graduated: December 2024

B.A. in Data Science | Minor in Geospatial Technology | Minor in Sustainable Design

- **Coursework:** Foundations of Data Science, Principles & Techniques of Data Science, Data Engineering, Data Structures, Data Mining & Analytics, Data Inference & Decisions, Linear Algebra, Geographic Information Science, Remote Sensing

Chulalongkorn University

Bangkok, Thailand

Climate Resilience Study Abroad Program

June 2023 — July 2023

- **Coursework:** Landscape Architecture, International Community Development in Asia

WORK EXPERIENCE

Student Environmental Resource Center

Berkeley, CA

Data Analysis Associate

August 2024 — Present

- Maintain and update events, social media, and program databases, conducting data analysis using Jupyter Notebooks

Green Team Associate

May 2022 — June 2024

- Student lead of Cal's Single-Use Plastic Elimination by 2030 Policy; communicated with 10+ key stakeholders to meet waste reduction targets, led a membership team of 15 students, and created educational campaigns to inform campus of the policy

Museum of Vertebrate Zoology

Berkeley, CA

GIS Assistant

September 2023 — Present

- Developed 20+ new range maps in ArcGIS Pro for AmphibiaWeb species accounts to illustrate geographic distributions
- Assist with georeferencing specimen localities, maintaining GIS databases, and cleaning locality records using Python/SQL

SponsorForce

Tokyo, Japan

Data Science & AI Intern

June 2024 — August 2024

- Developed a chatbot for real-time sports sponsorship queries, integrating sports database APIs and OpenAI for NLP
- Designed a recommendation system to match sports teams with sponsors based on performance and sponsorship alignment

RESEARCH

Quantitative Ecosystem Dynamics Lab

Berkeley, CA

Undergraduate Data Science Researcher

September 2022 — May 2023

Spring 2023: US Carbon Credit Projects Evaluation | [Project Poster](#)

- Evaluated the trustworthiness and effectiveness of carbon offset projects using a remote sensing-based evaluation method
- Conducted linear regression analysis and visualized slope differences across regions, countries, project types, and voluntary registries to quantify trends, finding that 53 out of 56 projects reported more offsets than observed carbon reductions

Fall 2022: Mapping Global Terrestrial Photosynthesis with Machine Learning & Satellite Images | [Project Poster](#)

- Developed a Google Earth Engine Web Application in JavaScript; created a time series chart and a widget to view different years, allowing users to visualize and analyze global annual gross primary productivity (GPP)
- Developed Lasso, SVM, Random Forest, XGBoost, and MLP models for hourly and monthly GPP datasets; found that SVM and Random Forest achieved the best prediction performance for monthly and hourly data, respectively

PROJECTS

Analyzing the Impact of Endorsements and Campaign Spending | [Project Link](#)

December 2024

- Analyzed the effects of Gun Sense endorsements on Democratic primaries using causal inference methods and campaign spending disparities between incumbents and challengers through a Bayesian Hierarchical model.

Predicting Solar PV and Energy Output for UC Berkeley Buildings Using Weather Variables | [Project Link](#)

December 2024

- Trained predictive models to predict electricity generation and usage using historical solar, weather, and usage data.

Geographic Information Science Class: The Urban Heat Island Effect in SF | [Project Link](#)

December 2023

- Conducted a vector and raster suitability analysis to implement urban heat island effect mitigation efforts in SF.

SKILLS

Computer: Python, Java, C, SQL, MongoDB, ArcGIS Pro, QGIS, Google Earth Engine, ENVI | Adobe (Illustrator, Photoshop)