

Sophia Yi

Los Angeles, CA | 661-713-1539 | sophiayi@g.ucla.edu | <https://www.linkedin.com/in/yi-sophia/>

EDUCATION

University of California, Los Angeles

Bachelor of Science in Statistics & Data Science, Bachelor of Arts in Spanish

September 2022 - June 2026

Los Angeles, CA

- Publications:

- * English to Spanish Translation: Transformar los datos en empatía: cómo reinventé mi pasión en UCLA, Division of Physical Sciences, 2024
- * Coordinating for Clicks: Learning in Multi-Agent Information Asymmetric Cascading Bandits, Department of Applied Math, 2025
- * IN REVIEW: Robust Multi-Agent Bandits with Heavy-Tailed Rewards and Information Asymmetry, Department of Applied Math, 2025
- Relevant Coursework: Optimization, Mathematical Probability, Computational Statistics with R, Causal Inference, Linear Models, Statistical Models and Data Mining, Spanish Linguistics and Cognition

EXPERIENCE

Data Analyst Intern - Transportation Consulting

Summer 2025

LSY Enterprise

Santa Clarita, CA

- Analyzed six years of collision data to identify trends and high-risk patterns at major intersections for the City of Oxnard and City of Ojai
- Supported the development of a Local Road Safety Plan (LRSP) by compiling, cleaning, and visualizing crash data for data-driven decision making
- Collaborated with senior analysts and engineers to deliver insights used in roadway safety improvements

Machine Learning Undergraduate Researcher

October 2024 – Present

UCLA Department of Applied Mathematics

Los Angeles, CA

- Advance theoretical modeling in multi-agent systems by enhancing the cascading bandit framework under asymmetric information; research submitted to the *Journal of Machine Learning*
- Strengthen project direction by synthesizing insights from over 20 reinforcement learning publications, shaping analytical approach and experimental validation

Volunteer Teacher

June 2024 - Present

GM Disability Ministry

Sun Valley, CA

- Teach and support individuals aged 6-40 with disabilities in a weekly faith-based classroom setting, adapting lessons to meet diverse learning and behavioral needs
- Develop individualized teaching approaches for students with autism and Down syndrome in a one-on-one classroom setting

Content and Narrative Design Intern, Spanish

June 2024 - October 2024

LingoHero

Remote

- Drove storyboarding progress by collaborating cross-functionally with artists and UI/UX designers, using Figma to craft engaging, culturally relevant user experiences
- Shaped Spanish-language curriculum by designing culturally informed lesson plans and narratives, enhancing app authenticity and learner engagement in the Mexican culture track

Undergraduate Research Assistant

April 2024 – June 2024

UCLA Department of Mathematics

Los Angeles, CA

- Spearheaded an independent research project under PhD mentorship, applying advanced concepts in probability and machine learning to develop original coursework and discussion material
- Delivered findings to an audience of graduate students and faculty, sharpening presentation skills and deepening domain knowledge through academic feedback

SKILLS

Programming Languages: R, Java, Python, Javascript, HTML/CSS

Tools/Technologies: React, Node.js, Matplotlib, Git, Visual Studio Code, Microsoft Office Suite, Tableau, Overleaf

Concepts: Neural Networks, Regression Modeling, Generalized Linear Models, Model Diagnostics, Bootstrapping, Simulation, A/B Testing, Statistical Visualization, Experimental Design, Numerical Optimization