

# MADELYN ROMBERG

Los Angeles, CA | (760)-533-9753 | madelynromberg@g.ucla.edu | [LinkedIn](#) | U.S. Citizen

---

## PROFESSIONAL EXPERIENCE

### **NASA'S Jet Propulsion Laboratory - *Researcher***

June 2021 - July 2022

*Pasadena, California (30hrs/wk)*

- Researched statistical relationships between landscape characterizations and their impacts on air quality during fires for air quality forecasts, climate predictions and the formulation of new satellite and aircraft missions
- Processed raw satellite data from Earth Engine Developers and NASA Open Data in Google Colaboratory and Google Earth Engine (Java, Python) to find statistically significant correlations
- Conducted literature review (40+ articles) for methodology, result interpretation, and manuscript development
- Presented weekly presentations on visualized Earth system data to various NASA, JPL, and UCLA departments
- Supplied data for JPL to develop a widely useable analysis and visualization framework using NASA's satellite on Google Earth Engine and to interpret atmospheric composition variations within the JPL's chemical reanalysis

### **Los Angeles Public Library - *Digital Historian***

Sept. 2019 - March 2020

*Los Angeles, California (20hrs/week)*

- Built a website and digital archive for various books held in special collections using HTML, CSS, and JavaScript
- Researched history of street names to increase accessibility to public histories
- Facilitated communications between library staff, UCLA faculty, and contributors through weekly presentations

### **Flip the West - *Campaign and Project Manager***

July 2020 - Jan. 2021

*Los Angeles, California (25hrs/wk)*

- Overwatched 200+ interns, directly managed 30 members, and ensured scheduling compliance, interpersonal committee communications, and acting liaison between upper management and committee members
- Collected, consolidated, and visualized program data in Python for biweekly progress report meetings
- Trained and oriented 66 new program participants on local and national policy and 2 softwares

---

## EDUCATION

### **Rithm School - *Software Engineer Intern***

Jan. 2023 - Present

*Los Angeles, California (60hrs/wk)*

### **University of California, Los Angeles - *College of Letters and Sciences, College Honors***

Atmospheric and Oceanic Sciences B.S., History B.A.

GPA: 3.89

Relevant Coursework: Intro & Advanced Computing for Geoscience Data, Statistics, Remote Sensing Processing and Lab for Geologists, Atmospheric: Aerosols, Chemistry and Air Pollution, Dynamics and Thermodynamics; Climate Mitigation, Climate Change and Modeling, Intro to Collaborative Learning

Organizations: Undergraduate Research Department, Undergraduate Learning Assistant Program, Undergraduate Law Journal, Lawyers Without Borders, UniCamp, Pre - Law Society, Field Hockey, Gamma Phi Beta, Chi Epsilon Pi

---

## LEADERSHIP & EXTRACURRICULARS

### **The Bruin Experiment at UCLA - *President* (15hrs/wk)**

Sept. 2018 - June 2022

- Managed 80 tutors and 200+ students from underserved communities by conducting executive and general meetings
- Conducted oversight of curriculum, social media, finances, retention and recruitment
- Controlled \$20k budget and increased funding by 63% in accordance with SOLE standards

### **Project Literacy at UCLA - *Executive Funding Director* (15hrs/wk)**

Sept. 2018 - June 2020

- Increased \$35k budget by 24% and 28% for 2019 and 2020 to service recipients at eight sites across LA county
- Mentored underserved youth in literacy and English language acquisition through personalized curriculum

---

## SKILLS & OTHER

**Skills:** Python (MatLab, Pandas, GeoPandas, Seaborn, SciPy, Numpy, Jupyter, etc), Google Colaboratory, Earth System Data Visualization & Analysis, Google Earth Engine, Remote Sensing, Statistics, R, Model & Machine Learning, Tableau

**Languages:** Native English, Proficiency in Spanish

**Publications:** UCLA Undergraduate Law Journal (2021)., Journal of World Affairs at UCLA (2021).

**Awards:** 2021 JIFRESSE Summer Internship Program Recipient, Dean's Honors