# MAGGIE (MENGYUAN) LI

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#### **EDUCATION**

**Columbia University** 

New York, NY Ph.D. Environmental Health Sciences Expected 2024

University of California, Berkeley

Berkeley, CA B.S. Conservation and Resource Studies May 2019

Honors, Highest Distinction in General Scholarship

B.A. Geography

High Distinction in General Scholarship

#### AWARDS AND SCHOLARSHIPS

## David A. Rose Scholarship in Physical Geography

May 2019

Recipient of award for a graduating senior demonstrating outstanding work in physical geography/cartography in the Department of Geography at UC Berkeley.

# Regents' and Chancellor's Scholar (top 2% of incoming class)

2015-2019

"The Regents' and Chancellor's Scholarship is the most prestigious scholarship offered by UC Berkeley to entering undergraduates, and attracts, retains, and graduates the most sought-after students in the world."

### RESEARCH EXPERIENCE

# **Columbia University**

New York, NY

PhD Researcher

Sep. 2019 – Present

- Quantified air pollution concentrations and coverage in American Indian communities.
- Investigated and quantified exposure disparities that exists between predominantly Native American and non-native regions.
- Working to connect community exposure data to individual-level health outcomes.

### **Pennsylvania State University**

State College, PA

Climate Science REU Researcher

Jun. – Aug. 2018

- Developed methodology and python code to calculate dust burden from monthly and daily Weather Research and Forecasting (WRF) model and NASA satellite data.
- Connected exposure data to respiratory health outcomes data in Senegal.
- Visualized data using ArcGIS by creating choropleth maps displaying exposure and asthma outcome for children ages under 5 and individuals ages over 5.

### University of California, Berkeley

Berkeley, CA

*Undergraduate Researcher* 

Mar. – Aug. 2017

 Utilized remote sensing to study environmental impacts of cannabis over time in Mendocino and Humboldt counties using ArcGIS and Google Earth Engine.

- Digitized and quantified regions of cannabis production, organizing and compiling these individual shapefiles into geodatabases.
- Contributions aided and acknowledged in a published manuscript: https://doi.org/10.1088/1748-9326/aaeade

### **COMPUTER SKILLS**

Programming Languages: R, Python, SAS

Applications/Platforms: ArcGIS, Google Earth Engine, RStudio, Jupyter Notebook, GitHub

### **PUBLICATIONS**

Toure, N. O., Gueye, N. R. D., Mbow-Diokhane, A., Jenkins, G. S., **Li, M.**, Drame, M. S., et al. (2019). Observed and modeled seasonal air quality and respiratory health in Senegal during 2015 and 2016. *GeoHealth*, 3, 423-390. <a href="https://doi.org/10.1029/2019GH000214">https://doi.org/10.1029/2019GH000214</a>

### **CONFERENCE AND SEMINAR PRESENTATIONS**

Li M. Quantifying Air Pollution in American Indian Communities. Seminar Series, Environmental Health Sciences Department (EHS), Mailman School of Public Health (MSPH), Columbia University. New York, NY. April 2020. Oral.

Association of American Geographers Annual Meeting, Geospatial Health Research Poster Session, "Impacts of Saharan dust on respiratory health across Senegal," Washington, DC, April 2019.

American Meteorological Society, 99<sup>th</sup> Annual Meeting, 10<sup>th</sup> Conference on Environment and Health, "Impacts of Saharan dust on asthma outcomes across Senegal," Phoenix, AZ. January 2019. *Awardee: Top Overall Student Presentation* 

Uplift Climate Conference, "Effective Communication for Equitable Spaces" Lona Mesa Campground, Moab, UT, September 2017.

### **TEACHING**

### **Columbia University**

EHSC P8307: Molecular Epidemiology

2020

# **Teaching Assistant**

This course covers conceptual and methodological issues in molecular epidemiology, including the application of biomarkers to the study of disease causation, risk assessment, and prevention, study design and statistical methods in data analysis.

### **UC Berkeley**

ESPM 198: Foundations of Effective Communication

2017

#### **Primary Instructor**

A 2-unit UC Berkeley undergraduate course encompassing social theories and methods of effective communication across diverse audiences and disciplines.

### COMMUNITY SERVICE & LEADERSHIP

### **Student Environmental Resource Center (SERC)**

Aug. 2017 – May 2019

Community Engagement Associate

- Supervised a team of students to organize campus events and compile environmental resources.
- Organized regular meetings with campus student leaders.

- Spearheaded data collection and management initiative for environmental campus organizations.
- Created and managed general semesterly membership program of 100+ students.

### **Berkeley Student Food Collective (BSFC)**

Aug. 2018 – May 2019

Board Chair

- Organized and led board meetings for a 501(c)(3) nonprofit, volunteer, educational, member-run grocery store.
- Represented the BSFC at all campus food system stakeholder & coalition meetings.
- Supported board members in maintaining storefront, fostering member cohesion, and fulfilling educational goals.

### **UC Berkeley Residential and Student Services Programs**

Aug. 2016 – May 2017

Global Environment Theme House (GETH) Theme Program Assistant

- Collaborated with College of Natural Resources faculty to design seminar curriculum.
- Organized retreats and educational activities to develop and reinforce community inclusiveness.
- Mentored and interacted with residents regularly to ensure holistic wellness.

#### LANGUAGES

**English**: Native Language

Chinese: Proficient Speaking and Listening, Novice Reading and Writing