MAGGIE (MENGYUAN) LI

Email: ml4424@cumc.columbia.edu
LinkedIn: linkedin.com/in/li-maggie
Personal Website: maggie-li.github.io

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. **https://doi.org/10.1029/2019GH000214**

CONFERENCE AND SEMINAR PRESENTATIONS

Columbia University Environmental Health Sciences Departmental Seminar Series, "Air Pollution in American Indian Communities," New York, NY. February 2021; April 2020.

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, 99th Annual Meeting, 10th 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 Fellow
   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.

Columbia University
SHARP Training Program: GIS Workshop: Visualizing and Analyzing Health Data   2020
   Workshop Guide
   This two-day summer workshop provides an overview of fundamental concepts and training of hands-on techniques for health data visualization and analysis using publicly available open-source GIS programs.

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.
- Facilitated semesterly check-in meetings with campus student leaders.
- Spearheaded data collection and institutional knowledge retention efforts for environmental campus organizations.
- Created and managed volunteer 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 physical 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 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