

# Elmera Azadpour

elmera@ucsb.edu | Santa Barbara, CA | [elmeraa.github.io/ea\\_website/](https://elmeraa.github.io/ea_website/)

## EDUCATION

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**Master of Environmental Science and Management** (Expected June 2022)

**Bren School of Environmental Science & Management – University of California, Santa Barbara (UCSB)**

Specialization: Energy & Climate

Highlighted/Anticipated Coursework: Environmental Modeling, Earth System Science, Advanced Data Analyses for Environmental Science and Management, Climate Change Impacts and Adaptation

Awards: Forest Sustainability Fellowship

**Honors Bachelor of Sciences in Environmental Biology**, GPA 3.6 (December 2019)

**University of Utah**, Salt Lake City (SLC), Utah

Honor's Thesis: The effect of inorganic vs organic fertilizer on an urban lawn in Salt Lake City, Utah

Awards: Department of Biology Undergraduate Research Stipend, \$1,000

## MASTERS GROUP PROJECT

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**Creating a Region-wide Green Infrastructure Strategic Plan for Maunaloa Bay** (4/21-Present)

**Role:** Data Co-Manager | **Client:** Mālama Maunaloa

- Co-Authored Data Management Plan
- Maintained the group's shared online information and managed the use of databases
- Organized data and created metadata so, after the project is completed, other users may access and utilize the data

## PROFESSIONAL EXPERIENCE

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**Arnhold Environmental Graduate Fellowship** (6/21-Present)

**Environmental Market Solutions Lab (emLab) and Conservation International (CI)**, Santa Barbara, CA

**Advisor:** Dr. Ashley Larsen

- Managed spatial and remote sensing data related to land use/land cover, agriculture, climate, & biodiversity  
Developed and execute reproducible code for spatial and statistical analyses
- Gathered and review literature
- Contributed to presentations and publications
- Mentored undergraduate student researcher

**WATER, VEGETATION, & SOCIETY (WAVES) Laboratory Intern** (6/21-Present)

**Earth Research Institute (ERI)**, Santa Barbara, CA

**Advisor:** Dr. Kelly Caylor

- Investigated water use in riparian forests along Frances Rhône River
- Utilized remote sensing and raster data to identify long-term correlations between evapotranspiration and precipitation
- Conducted geospatial analyses in R

**Spring Science Undergraduate Laboratory Intern** (1/20-5/20)

**Lawrence Berkeley National Laboratory (LBNL)**, Berkeley, CA

**Advisor:** Dr. Lara Kueppers

- Conducted research project that analyzed the effects of rainfall gradients on future gross primary productivity (GPP) across the Isthmus of Panama to aid in the advancement of NGEE- Tropics project
- Extracted data from published literature and NOAA databases and analyzed the data in coding program R
- Compared empirical data to vegetation model (FATES) output to draw conclusions
- Generated data visualizations in R for 23-page final write up and poster presentation at LBNL

### **Summer Science Undergraduate Laboratory Intern (5/19-8/19)**

**Lawrence Berkeley National Laboratory (LBNL), Berkeley, CA**

**Advisor: Dr. Trevor Keenan**

- Organized literature review of photosynthetic capacity ( $V_{\text{cmax}}$ ) plasticity observed within forest canopies to establish clear hypotheses for research project
- Collaborated with three lab team members on research project
- Generated data visualizations in R for 26-page final write up and poster presentation at LBNL
- Presented final poster at American Geophysical Union (AGU) 2019 conference and Ecological Society of America (ESA) 2020 conference

### **Research Associate (8/17-12/19)**

**Urban Ecology Research Lab, The University of Utah**

**Advisor: Dr. Diane Pataki**

- Conducted three-month field campaign on University of Utah campus
- Collected soil and grass samples for  $\delta^{15}\text{N}$ ,  $\delta^{13}\text{C}$ , %N and ANPP data analysis
- Executed various sample preparation techniques (KCl extractions, soil moisture, and preparing samples for mass spectrometer) and conducted statistical analyses in R
- Submitted 30-page honors thesis write up

### **PUBLICATIONS**

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Powell T; **Azadpour E**; Faybishenko B (2020): Wind speed data from NCEI Marcos A Gelabert station, Panama, Jan 2008 – Dec 2019. 1.0. NGEF Tropics Data Collection. (dataset). <http://dx.doi.org/10.15486/ngt/1633769>

### **CONFERENCES AND SEMINARS**

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Presented research papers at the following conferences: AGU, San Francisco, CA: "The effect of rainfall gradients on gross primary productivity (GPP) across the Isthmus of Panama" (December 2020); ESA, Salt Lake City, UT: "Constraints on Global Photosynthetic Capacity ( $V_{\text{cmax}}$ ) Within Canopies" (August 2020); AGU, San Francisco, CA: "Constraints on Global Photosynthetic Capacity ( $V_{\text{cmax}}$ ) Within Canopies" (December 2019)

Attended the following conferences: The Institut Pierre-Simon Laplace (IPSL), Climate Change: Challenges and Issues for the Earth Sciences, Paris, FR (July 2020); Berkeley Atmospheric Sciences Center (BASC) Symposium, Berkeley, CA (February 2020)

### **SKILLS AND AFFILIATIONS**

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**Computer:** R for Statistics, DB Browser for SQ Lite, Microsoft Office Suite, GitHub, ArcGIS, Land-Surface Modeling (ELM), Functionally Assembled Terrestrial Ecosystem Simulator (FATES), Google Earth Engine (GEE) Adobe Suite

**Language:** English (Native) and Farsi (Advanced Working Proficiency)

**Affiliations:** Student Member of Ecological Society of America, Student Member of American Geophysical Union, Diversity Scholar for R-Studio 2020 Conference, Student Member of Middle Eastern Resource Center