

Erika Egg

(805) 904-8033 | egg@bren.ucsb.edu | [Website](#) | [GitHub](#) | [LinkedIn](#) | Santa Barbara, CA

SUMMARY OF QUALIFICATIONS

- 3+ years of coding experience in R/RStudio, initially teaching myself during a chaparral restoration project in the D'Antonio lab, and 1+ years in Python/JupyterLab for linguistics and environmental applications
- ~2.5 years of internship experience supporting transparent data archival at the Arctic Data Center at NCEAS and ~2 years combined of lab and technical experience with the MSI Analytical Lab and SBC-LTER Kelp Farm
- Data science education co-developing food security data analysis projects using R, Shiny, and Tableau and marine ecology education developing a grant proposal related to hawksbill sea turtles and climate change
- An interdisciplinary perspective from triple majoring and pursuing additional passions, such as film
- Able to communicate information to a wide range of audiences and collaborate and assume leadership roles in teams of varying sizes

EDUCATION

Master of Environmental Data Science, 4.00 GPA (Expected June 2023)

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

Highlighted Coursework: Python for Environmental Data Science, Geospatial Analysis & Remote Sensing, Machine Learning in Environmental Science, Data Visualization and Communication, Modeling Environmental Systems, Databases and Data Management (all to be completed by June 2023)

Leadership/Involvement: MEDS Student-Faculty Representative – Bren Student Leadership Collective (BSLC) (10/22–Present), Mentor – Hack2O (11/22) (one day water data hackathon for ENV S 193SW students)

Bachelor of Arts in Environmental Studies, Linguistics (Emphasis in Language and Speech Technologies), and History of Art & Architecture (Emphasis in Architecture and Environment), 3.98 GPA (June 2022)

University of California, Santa Barbara (UCSB)

Honors/Awards: Highest Honors, Regents Scholar, Phi Beta Kappa, Kirby Jones Scholarship, Duval Scholarship, Corwin Award for Best Student Film

Leadership/Involvement: Board Member – Regents Scholars Association (5/20–6/22), Board Member & Treasurer – Your Children's Trees at UCSB (9/21–6/22)

SKILLS

Programming Languages & Environments: R/RStudio, Python, JupyterLab, VS Code

Software: Git/GitHub, Google Earth Engine, Tableau, Toon Boom Harmony

Technical: Data Wrangling and Analysis, Merging Datasets, Data Visualization, Shiny App Communication, NLP

DATA EXPERIENCE

Data Management Intern (6/20–Present)

Arctic Data Center (ADC), National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara, CA

- Scrutinizing and documenting data and metadata from arctic research projects (65+) using R/RStudio, counseling and interfacing with researchers to create an accurate and detailed representation of said data
- Collaborating with teammates to troubleshoot code and review datasets, generate edits in training guide protocol and workflows, fix bugs within the ADC's functions in R, and assist with curating new R packages

Undergraduate Research Assistant (Environmental Factors & COVID-19) (3/21–8/21)

MacDonald Lab, UCSB

- Assembled a compiled dataset in Google Earth Engine and R with COVID-19 information, temperature, solar radiation, and location data for use in further statistical analysis
- Visualized said dataset as scatterplots in R to find preliminary intersections between the effects of COVID-19 and temperature, solar radiation, and location

MARINE SCIENCE EXPERIENCE

Student Lab Assistant – MSI Analytical Lab, UCSB (4/21–7/22)

- Prepared researchers' samples for CHN and mass spectrometry analysis by checking in sample arrivals, acidifying samples, and weighing samples
- Maintained lab organization and upkeep through both digital and physical tasks

Undergraduate Research Assistant – SBC-LTER Kelp Farm (ARPA-E Kelp Genome Study), UCSB (10/19–4/20)

- Annotated over 1000 kelp images to assist in training deep learning analysis software
- Organized data pertaining to kelp grinding, drying, and other preparations of samples for chemical analysis

ENVIRONMENTAL DATA SCIENCE PROJECTS

Developing a Geospatial Model for Kelp Forest Management and Restoration (1/23–Present)

Master's Capstone Project | Role: Data Manager | Client: Ocean Rainforest, Inc.; UCSB IGPMs

- Synthesizing a dataset aligning spatiotemporal resolution of oceanographic factors and kelp forest health and abundance in the Santa Barbara Channel (SBC)
- Creating a model linking trends in associated factors to kelp forest health to predict where aquaculture and restoration citing should occur in the SBC
- Communicating the distribution of kelp forest, associated factors, and model through a Shiny app

Food Security in the face of COVID-19 (1/22–3/22)

ESM 244: Advanced Data Analysis | Role: Co-creator

- Examined food security as it pertains to age groups, income ranges, anxiety levels, and peoples' reasons for not working to inform others about the drivers of food insecurity during a pandemic and sentiments surrounding COVID-19 through four Shiny app visualizations
- Produced thorough documentation of methodologies to support transparency and clarity

A Visual Narrative of Food Insecurity in Santa Barbara County (a spatial data visualization) (9/20–6/21)

ENVS 195: Environmental Leadership Incubator Course Project | Role: Co-creator | Client: SB Food Bank

- Examined food security data in R to construct a map in Tableau with correlations between poverty levels and related factors to aid the Santa Barbara Food Bank in determining viable new food distribution locations

ADDITIONAL EXPERIENCE

Undergraduate Teaching Assistant – FAMST 54, UCSB (9/21–12/21; 3/22–6/22)

Tree Care Intern – Your Children's Trees, UCSB (4/21–9/21)

Undergraduate Assistant – LING 20 and LING 117, UCSB (9/20–12/20)

Undergraduate Research Assistant – D'Antonio Lab (Chaparral Restoration Project), UCSB (9/19–6/20)

NCOS Restoration Student Worker – CCBER, UCSB (4/19–9/19)

ADDITIONAL SKILLS & PROJECTS

Languages: Spanish (limited working proficiency), Basque (memorized proficiency)

Certifications: Wilderness First Aid, CPR

Projects: A Drop in the Sand (a 12-minute-long animated short film), FAMST 106: Film Production Course Project (9/20–3/21) | Roles: Co-producer; Colorist