

MALLORY GIESIE

(612) 516-0577 | [Email](#) | [Personal Website](#) | [LinkedIn](#) | [GitHub](#) | Santa Barbara, CA

EDUCATION

Master of Environmental Data Science, 3.9 GPA (June 2023)

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

Highlighted Coursework: Environmental Modelling, Machine Learning, Geospatial Analysis and Remote Sensing, Databases and Data Management

Bachelor of Science in Quantitative Environmental Science, 3.8 GPA (December 2021)

The American University of Paris, Paris, France

Minor: Computer Science

Honors/Awards: Magna Cum Laude Honors, Global Citizen Award

Highlighted Coursework: Web Applications, Numerical Problem Solving in the Environment

SKILLS

Languages:

- **Primary**: R, Python, SQL
- **Secondary**: GIS, Java, Java Script, HTML/CSS

Environments: RStudio, Visual Studio Code, Jupyter Notebook, Eclipse, QGIS

Technical: Science Communication, Machine Learning, Data Visualization, Environmental Modelling

Trainings/Workshops: Environmental Leadership Training, Shiny App Development

ENVIRONMENTAL DATA SCIENCE PROJECTS

[Climate Futures for Ecohydrological Modeling of Emerging Fire Regimes in Central Coast California](#)

Role: Data Manager | **Client**: UC Disaster Resilience Network | **Master's Capstone Project** (12/22–6/9)

- Designed a method to construct customized climate scenarios using CMIP5 Climate Projections
- Developed an RShiny app for custom climate scenario creation, serving as an input generator for the RHESSys-fire ecohydrological model
- Synthesized Cal-Adapt models to summarize future trends for the Santa Barbara region

Simulation of rapidly evolved grazing adaptations in Cladocera zooplankton

Undergraduate Thesis (8/21–1/22)

- Designed a simulation of a 24-hour grazing experiment to develop a plausible model for observed evolved variation in population grazing rates among two species of zooplankton
- Presented a final paper describing the experiment and the realized results and implications

EXPERIENCE

Seasonal Biologist – McCormick Biological inc., Bakersfield, CA (4/22–8/22)

- Conducted Blunt Nose Leopard Lizard surveys under CDFW protocol
- Gathered telemetry data on the geolocation of the San Joaquin Kit Fox to assist in habitat research that aids Kern County in developing conservation strategies to protect the species

Research Assistant – The University of Konstanz's Limnological Institute, Konstanz, Germany (6/21–9/21)

- Organized data management practices and implemented protocols to ensure principles of reproducibility
- Completed a common garden experiment to test two species of Zooplankton's ability to coevolve

ADDITIONAL EXPERIENCE

Additional Experience: Administrative Assistant – Wood Guttman & Bogart, Tustin, CA (4/18–8/19); Server – Hotel Seven4one, Laguna Beach, CA (8/16–8/19); Harvest Worker – Fallbrook Winery, Fallbrook, CA (8/18–11/18); Florist – Fairytale Flowers, Laguna Beach, CA (12/18–9/19)