# Mallory Giesie

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## EDUCATION

**Master of Environmental Data Science**, 3.85 GPA (Expected June 2023)
**Bren School of Environmental Science & Management – University of California, Santa Barbara (UCSB)**

> Highlighted Coursework: Machine Learning in Environmental Science, Statistics for Environmental Data Science, Modelling Environmental Systems, Python for Environmental Data Science (all to be completed by June 2023)

**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: Oceanography, Numerical Approaches to Problem Solving in the Environment, Artificial Intelligence, Languages and Data Structures

## SKILLS

**Languages:** R, Python, Java Script, HTML/CSS, GIS, Java
**Environments:** RStudio, Visual Studio Code, Jupyter Notebook, Eclipse, QGIS
**Technical:** Modelling, Statistical Analysis, Machine Learning, Web Development,
**Trainings/Workshops:** Environmental Leadership Training, Shiny App Development

## PROJECTS

**Climate Futures for Ecohydrological Modeling of Emerging Fire Regimes in Central Coast California**
(Present – 6/16) **Project Type** (Master's Capstone)

- Analyze Cal-Adapt climate model predictions to provide a statistical summary of climate futures.
- Visualize climate scenarios intended for both scientists and stakeholders.
- Deliver an interactive tool that takes specific climate scenarios, generates RHESSys-fire model inputs from the selected input, and visualizes intended climate futures.

**Simulation of rapidly evolved grazing adaptations in Cladocera zooplankton** (8/21 – 1/22)
**Project Type** (Undergraduate Thesis)

- 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.
- Trained to identify critical species within the San Joaquin Valley in order to conduct various presence or absence surveys

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

- Set up, monitored, and completed a common garden experiment to test two species of Zooplankton's ability to coevolve
- Organized data collecting practices and set up protocol to ensure the experiment followed principles of reproducibility
- Assisted with data collection and nutrient analysis testing

## ADDITIONAL WORK EXPERIENCE

**Administrative Assistant – Wood Guttman & Bogart**, Tustin, CA (04/2018–08/2019)
**Server – Hotel Seven4one**, Laguna Beach, CA (08/2016–08/2019)
**Harvest Worker – Fallbrook Winery**, Fallbrook, CA (08/2018–11/2018)