Matteo Torres

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[Website](#) | [GitHub](#) | [LinkedIn](#)

EDUCATION

Master of Environmental Data Science (MEDS) (Expected June 2025)
Bren School of Environmental Science & Management — University of California, Santa Barbara (UCSB)

> Highlighted Coursework: Python for Environmental Data Science, Databases and Data Management, Machine Learning in Environmental Science, Data Visualization and Communication
> Awards: Environmental Data Science Fellowship

Bachelor of Science in Biology | Minor in Dance (December 2023)
College of Natural Sciences & Mathematics — California State University, Long Beach (CSULB)

> Highlighted Coursework: Conservation Biology, Population Ecology, Biostatistics, Geographic Information Science for Natural Sciences, Undergraduate Directed Research
> Awards: Gulf of Maine Research Institute Research Grant, NSF Primate Population Ecology Research Grant

DATA SCIENCE PROJECT EXPERIENCE

Assessing Range Shifts of Intertidal Species for Conservation at Point Conception (1/25 – Present)
Master's Capstone Project | [Repository](#)

- Partnered with The Nature Conservancy to define project scope, deliverables, and target audiences for proposal
- Mapping intertidal species distributions along California's coastline in 100 *km* segments to identify species with range edges near Point Conception
- Applying segmented regression and Ensemble Species Distribution Models (ESDMs) to analyze historical abundance trends for range shift framework and forecast habitat suitability under different climate change scenarios
- Building and designing an interactive Shiny web application compiling all deliverables for publication on The Nature Conservancy's Geospatial Hub

Thomas Fire Analysis (12/24)
Master's Remote Sensing Course Project | [Repository](#) | [Blog](#)

- Analyzed Air Quality Index (AQI) to assess the impact of the Thomas Fire and track pollution trends
- Applied remote sensing techniques in Python, utilizing Landsat 8 raster data and NDVI to generate a false-color image of the fire scar for enhanced environmental monitoring
- Authored a technical blog post detailing data processing, code implementation, and visualization techniques

Additional Projects: Spotify Wrapped ([Dashboard](#)), Hairy Hermit Crab Infographic ([Blog](#)), Biodiversity Intactness Index (BII) Change ([Repository](#)), Identifying Impacts of Extreme Weather ([Repository](#)), Exploring Historical Redlining ([Repository](#))

EXPERIENCE

Research Intern (Liner Modeling) — CSULB Quantitative Ecology Lab, Long Beach, CA (5/23 – 12/23)

- Merged and tidied demographic and cognition datasets, grouping rhesus macaques by life stage (juvenile, adult)
- Developed linear mixed-effects models (LMEs) to analyze the impact of early-life adversities (hurricane birth, inexperienced mother, sibling presence, maternal death) on social attention across life stages
- Identified lower attention spans in juveniles with maternal inexperience and presented findings using data visualizations and model outputs to highlight insights into survival and reproductive success

Research Intern (Statistical Analysis) — NOAA Fisheries, Silver Spring, MD (Remote) (6/21 – 8/21)

- Processed LiDAR datasets to extract Arctic cloud signals at 7 km elevation across Alaska
- Isolated extreme precipitation events and analyzed associated cloud signal elevation and thickness to assess correlations with precipitation intensity
- Created a comparative analysis of cloud signal characteristics during extreme vs. baseline precipitation periods

SKILLS & ADDITIONAL EXPERIENCE

Technical: R, Python, SQL, ArcGIS, Git/GitHub, Microsoft Office Suite, Google Workspace
Additional Experience: Bartender — University of California, Los Angeles Faculty Club, Los Angeles, CA (10/23 – 7/24); COPE Health Scholar — Kaiser Permanente South Bay Medical Center, Harbor City, CA (10/19 – 4/20)