

# Mario Fernando Hernandez

Plainfield, NJ | (908) 370-3028 | mario.hndz05@gmail.com | [LinkedIn](#) | [Google Scholar](#) | [Website](#)

## Skills

**Programming Languages:** Python, R, SQL

**Tools and Packages:** NumPy, pandas, Matplotlib, seaborn, RStudio, TidyVerse, ggPlot, SQLite, PostgreSQL, JAGS, Microsoft Excel

**Statistical Techniques:** ANOVA, Linear Regression, Categorical Data Analysis, Principal Component Analysis, Frequentist and Bayesian Modes of Inference

**Spoken Languages:** English (Primary), Spanish (Fluent)

## Relevant Experience

### Data Science for All | Empowerment Fellow

10/22 – 02/23

#### *Correlation One*

- Accepted into a competitive (<3% acceptance rate) fellowship designed for new data scientists from underrepresented backgrounds.
- Led a small group of fellows in designing, analyzing, and visualizing a plastic waste data set on the Great Lakes with Python. Our results suggest plastic type encountered vary by beach but content is consistent throughout each of the lakes. [Datafolio here](#).
- Achieved Honors designation for high performance in extended cases and review modules testing skills in exploratory data analysis, data wrangling, and SQL.

### Postdoctoral Researcher

09/21 – 02/23

#### *University of California, Merced*

- Directed 2 projects focused on the dietary ecology of modern sharks. Duties included validation, exploratory analyses, statistical model-building, and visualization for dietary data from a variety of shark species in the Atlantic and the coast of California using R and Excel.
- Mentored 4 students on various parts of the analytical pipeline including data exploration, visualization, validation of statistical assumptions, and use of appropriate statistical models.
- Designed experiments with a particular emphasis on defining research questions, relevant hypotheses, and testing hypotheses using appropriate methods.

### PhD Candidate

06/16 – 08/21

#### *Louisiana State University*

- Led research projects quantifying the energetic pathways present within fish and invertebrate communities along the coast of Tanzania. Duties included validating stable isotope data, QA/QC, exploratory analyses, fitting of linear and mixing models, and data visualization using R as well as presentation of results in the form of guest and invited lectures.
- Collaborated with a group of ~24 researchers as part of a cross-disciplinary team to design international experiments, solve logistical issues, and ensure project goals were being met.
- Used stable isotope analyses in combination with statistical methods to gain insights into how fisheries species utilize adjacent marine habitats with results disseminated to fisheries stakeholders and managers. [Link to publication here](#).

## Education

**PhD | Louisiana State University, Oceanography and Coastal Sciences, 2021**

**Minor: Applied Statistics**

[Dissertation: "Fisheries Food Webs: Quantifying Habitat-use, Trophic Structure, and Energetic Pathways in Coastal Tanzania"](#)

**BA | Rutgers, The State University of New Jersey, Biological Sciences, 2014**