Gabriel Guzman Blanco

GitHub | Kaggle | LinkedIn | Portfolio | Email

Projects

Butterfly Population Analysis Link to Project

- Conducted entomological and botanical field research on the Gettysburg National Military Park (2020-2023) and analyzed this data using **R** and **Excel**
- Linked and quantified butterfly population changes to three plant types used in the butterfly life cycle: Nectar plants, larval plants, and warm-season grasses using **R**. Formulated a focus list for local conservation of local butterflies for National Park Service (NPS)
- Currently working on scientific publication of results

Ant Morphology Analysis Link to Project

- Proposed and tested hypotheses related to ant morphology and resource preference using an existing publicly available data set on ants native to Guadarra Mountains in Spain using **R**
- Created data visualizations using **R** in order to showcase statistical relationships and differences in morphological data visually

Professional Experience

Gettysburg College Gettysburg, PA
Undergraduate Research Assistant ..... Aug 2020 - Dec 2023

- Conducted entomological surveys of butterfly populations in the Gettysburg National Military Park (GNMP) to determine population changes and report results to the National Park Service
- Presented experimental results at the annual scientific symposium at Gettysburg College

Skills

Programming Languages **Python** (pandas, numpy, scikit-learn), **SQL** (MySQL, PostgreSQL), **R** (tydiverse, ggplot2, rstatix)

Technologies Git, **AWS** (S3), **NoSQL** (MongoDB)

Education

University of Colorado, Boulder Boulder, CO
Masters of Computer Science ..... June 2026

- Relevant Coursework:
- Concentration(s): Data Science and Data Engineering

Gettysburg College Gettysburg, PA
Bachelor of Science in Environmental Studies ..... May 2024

- Relevant Coursework: Introduction to Scientific Computation (CS 107), Applied Statistics (MATH 107), Introduction to Geographic Information Systems (ES 230), Remote Sensing (ES 363)
- Concentration(s): Environmental Science, GIS and Spatial Analysis & Wildlife and Conservation Ecology
- Minor(s): Biology

Last updated: March 25, 2024