OLIVER C. STRINGHAM

PhD, Scientific Researcher & Data Scientist

I apply scientific rigor and curiosity to solve real-world problems. I use data science tools including statistics, machine learning, natural language processing, and geospatial analyses to answer questions about underlying systems.

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LinkedIn

UpWork

Google Scholar

GitHub

EDUCATION

2018 — **Rutgers University**
PhD in Ecology & Evolution — New Jersey, USA

2014 — **Rutgers University**
BS in Environmental Science — New Jersey, USA
BS in Ecology, Evolution, & Natural Resources
Certificate in GIS (Geographic Information Systems)

PROFESSIONAL EXPERIENCE

2022-06 | present — **Senior Project Administrator**
Rutgers University — New Jersey, USA
- Synthesize impacts of the Institute of Earth, Ocean, and Atmospheric Sciences using data science techniques including data acquisition, cleaning, and visualization.
- Assist research labs with data and science needs, including applying statistical methods and writing papers.

2020-01 | present — **Data Scientist**
Freelancer (UpWork & Contract Work) — USA & Australia
- Machine Learning models to predict daily number of orders for retail company
- Spatial optimization to determine zones for delivery trucks
- Spatial clustering methods to categorize property evaluation
- Quantitative analysis of deforestation rates from spatial raster data

2019-01 | 2022-06 — **Research Associate (Postdoctoral)**
The University of Adelaide — Adelaide, Australia
- Applied data science principles to researching wildlife trade
- Coded over 80 webscrapers to collect data of online wildlife trade
- Created/maintained MySQL database of >6 million records for wildlife trade
- Machine learning tools (text classification) to process online data
- Created web application with python (Flask) for Australian gov't
- Communicated results in reports, papers, and talks
- Supervised and lead a team of skilled professionals

2015-09 | 2018-12 — **PhD Researcher & Teaching Assistant**
Rutgers University — New Jersey, USA
- Researched the online pet trade of reptiles and their invasion risk
- Taught courses: General Biology, Ornithology, Plant Ecology
- Worked in an interdisciplinary international team of scientists

2015-01 | 2015-06 — **Geospatial (GIS) Technician**
New Jersey Depart. of Fish & Wildlife — New Jersey, USA
- Performed geospatial analyses for endangered species programs
- Used python to automate geospatial processes previously done manually

PROGRAMMING

R / tidyverse
Python / pandas / Flask
SQL / PostgreSQL / MySQL
git / GitHub
HTML / CSS / Javascript

DATA ANALYSIS

Machine Learning, Regression:
scikit-learn / tidymodels
Geospatial Analysis:
sf / geopandas / PostGIS
Data Visualization:
ggplot2 / seaborn / JS

Last updated on 2022-12-16.

*This resume was made with the R package **pagedown**.*

2015-01 | 2015-08

Geospatial (GIS) Analyst
Harbor & Estuary Program, Hudson River Foundation — New York, USA
• Performed spatial analyses regarding public access to waterways in NYC/NJ

SCIENTIFIC PUBLICATIONS

20 scientific papers, >300 citations
Google Scholar Profile

2021 **Text classification to streamline online wildlife trade analyses**
PLOS ONE
https://doi.org/10.1371/journal.pone.0254007

2021 **Dataset of seized wildlife and their intended uses**
Data in Brief
https://doi.org/10.1016/j.dib.2021.107531

2020 **A guide to using the internet to study the wildlife trade**
Conservation Biology
https://doi.org/10.1111/cobi.13675 (PDF)

2022 **The dark web trades wildlife, but mostly for use as drugs**
In review
https://ecoevorxiv.org/repository/view/3731/