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, and geospatial analyses to answer questions about underlying systems.

💼 PROFESSIONAL EXPERIENCE

2022-06 | present

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

2020-01 | present

Data Scientist
Freelancer (UpWork & Contract Work)   📍 USA & Australia
- Quantitative analysis of deforestation rates from spatial raster data
- Interactive web maps to visualize spatial data with leaflet, Mapbox, and Javascript
- Machine Learning models to predict daily number of orders for retail company
- Spatial optimization to determine zones for delivery trucks

2019-01 | 2022-06

Research Associate (Postdoctoral)
The University of Adelaide   📍 Adelaide, Australia
- Applied data science principles to researching wildlife trade
- Coded over 80 web scrapers 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 three graduate and two undergraduate students

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

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

🎓 EDUCATION

2018

Rutgers University
PhD in Ecology & Evolution   📍 New Jersey, USA

🌐 Jersey City, New Jersey
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🔗 oliverstringham.com
in LinkedIn
🔍 Google Scholar
⌨ GitHub

</> PROGRAMMING

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

📊 DATA ANALYSIS

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

2014   ● **Rutgers University**

BS in Environmental Science   **♥** New Jersey, USA

BS in Ecology, Evolution, & Natural Resources

Certificate in GIS (Geographic Information Systems) 🌐

🖳 SCIENTIFIC PUBLICATIONS

● **20 peer-reviewed papers, >500 citations, h-index = 11**
Google Scholar Profile

2023 ● **Building an online surveillance system to monitor wildlife trade for environmental biosecurity [Technical Report]**
http://dx.doi.org/10.13140/RG.2.2.13336.78087 (PDF)

2023 ● **The dark web trades wildlife, but mostly for use as drugs**
People and Nature | https://doi.org/10.1002/pan3.10469

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

2021 ● **Live reptile smuggling is predicted by trends in the legal exotic pet trade**
Conservation Letters | https://doi.org/10.1111/conl.12833

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

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

🔤 LANGUAGES

● **English**
Fluent

● **Spanish**
Conversationally fluent