

Jordan Frey

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Technical Skills

Computer Languages: R; Python; SQL; JavaScript / Leaflet.js

Software/Platforms: ArcGIS; QGIS; Power BI; Excel; SQL Server; PostgreSQL / PostGIS; Access; GeoServer; MapBox

Work Experience

Staff Scientist II Jul. 2020 – Present
Data Science Intern May 2018 – Jul. 2018

The Intelligence Group, Syracuse, NY

- Developed the *Triage and Intelligence Gathering eDiscovery Routine (TIGER)*, an eDiscovery software designed to triage and perform a first-level review of documents to be further examined for ongoing litigation. To date, the software has processed millions of pages of documents, and reduced the need for manual document review by approximately two-thirds.
- Delivered an interactive *Power BI* dashboard to a multinational company with the goal of improving its understanding of evolving environmental regulations impacting its business.
- Developed a *Python* program to automatically scrape website content on a set schedule and email users when the web content has changed
- Developed a *Python* program to consolidate TIFF, JPG, and text files into PDF documents
- Developed a *Python* program to batch-delete documents based on user-input
- Developed ad hoc *R* scripts for ETL tasks and to produce summary statistics on data
- Developed custom themes for *Microsoft Power BI* using *JSON*
- Created custom data visualizations using *R*, including bar charts, TOC curves, and word clouds
- Developed *SQL* queries to retrieve data and normalize tables in Microsoft Access
- Transliterated *SQL* queries into native *R* code
- Performed spatial joins and various geometric calculations in *ArcMap*
- Developed front-end *Microsoft Access* forms using *SQL* and *VBA*

Graduate Research Assistant Aug. 2019 – June 2020
Teaching Assistant Jan. 2019 – May 2019

Clark University, Worcester, MA

- Assisted with a study focused on urban resiliency and vulnerability in Florida to environmental perturbations
- Developed *R* and *Python* scripts to clean, visualize, and analyze multivariate geospatial data
- Implemented statistical methods such as PCA, k-means clustering, hierarchical clustering, and linear regression
- Graded assignments, answered questions, and reinforced concepts in coding, version control, and GIS for the course, "*Geospatial Analysis with R*"

Geospatial Intern Jun. 2019 – Aug. 2019

Travelers, Hartford, CT

- Developed a *Python* program to automate the formatting of *ArcGIS Pro* map layouts, alter layer definition queries, and export the maps as PDF documents
- Developed an *R* program to *web scrape* and geocode data on over 110,000 insurance agencies
- Updated an *ArcGIS Online* web application to contain additional data layers and widgets so underwriters could make more informed business decisions
- Developed *SQL Server* queries (including spatial queries on geometries) for data QA/QC

Education

Master of Science in Geographic Information Science - Clark University– Worcester, MA – 3.97 GPA Grad. 2020
Certificate of Advanced Study in Data Science - Syracuse University – Syracuse, NY – 3.8 GPA Grad. 2018
Bachelor of Arts in Environmental Studies - Ithaca College, 2015 – Ithaca, NY – 3.2 GPA Grad. 2015

Portfolio Sample

- Geospatial Time Series Analysis with R: <https://freygeospatial.github.io/PM25-TimeSeries-R-Tutorial/>
- Streamlining a GIS workflow with PostGIS: <https://www.freygeospatial.com/blog/streamlining-a-gis-workflow-with-postgis>
- Pansharpener Remotely Sensed Data with R: <https://www.freygeospatial.com/blog/pansharpener-with-r>
- Hosting a PostgreSQL/PostGIS Database on AWS: <https://www.freygeospatial.com/blog/hosting-postgis-on-aws>
- Remote Sensing Wildfire Severity: <https://www.freygeospatial.com/carr-wildfire.html>
- Creating an Animated Time Series Map with R: <https://www.freygeospatial.com/animated-time-series-housing.html>
- Citi Bike (NYC) Rental Data Analysis: <https://www.freygeospatial.com/citi-bike-analysis.html>

Relevant Coursework

Clark University:

- Advanced Data Structures Spring 2020
- Advanced Raster Modeling & GIS Spring 2020
- Directed Study: Web Mapping with JavaScript Spring 2020
- Directed Study: Working with PostgreSQL/PostGIS Databases Fall 2019
- GIS and Map Comparison Fall 2019
- Innovations in Earth Observation Fall 2019
- Advanced Vector GIS Spring 2019
- Computer Programming for GIS Spring 2019
- Web Mapping and Open Source GIS Spring 2019
- Introduction to Remote Sensing Fall 2018
- Intermediate Quantitative Methods in Geography Fall 2018
- Introduction to Geographic Information Systems Fall 2018

Syracuse University:

- Data Mining Spring 2018
- Information Visualization Spring 2018
- Metadata Spring 2018
- Applied Data Science Fall 2017
- Data Administration Concepts and Database Management Fall 2017

Non-matriculated:

- Introduction to Python Programming (Bergen Community College) Spring 2017
- Statistics I (Rutgers University) Summer 2017
- Statistics II (Rutgers University) Summer 2017

Ithaca College:

- Technical Writing Fall 2014

Professional Development

Udemy.com e-Learning:

- Python A-Z: Python for Data Science Jan. 2020
- Core Spatial Data Analysis: Introductory GIS with R and QGIS Apr. 2018
- R Programming: Advanced Analytics in R for Data Science Feb. 2018
- R Programming A-Z: R for Data Science Nov. 2017

Esri Training

- Python for Everyone May 2017
- Python Scripting for Geoprocessing Workflows Apr. 2017
- Basics of Python for ArcGIS 10 Apr. 2017
- Georeferencing Raster Data Using ArcGIS Feb. 2017
- Basics of Map Projections Nov. 2016
- Basics of Geographic Coordinate Systems Nov. 2016
- Getting Started with GIS Nov. 2016