ADRIAN F. FERRAR

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Geospatial specialist and developer with foundational knowledge in GIS, programming and asset management. Experienced in solving geospatial problems, automating dataset procurement/maintenance/dissemination, producing insightfully pleasing web maps and collaborating with stakeholders on citywide data initiatives.

EDUCATION

Hunter College: Geography Dept. *Master of Science in Geoinformatics*

Graduated May 2018

The City College of New York: Earth & Atmospheric Science Dept.

Graduated May 2014

Bachelor of Science in Earth System Science, Minor in Economics

RELEVANT COURSEWORK

- Quantitative Methods in Geography
- Advanced GeoVisualization
- ❖ GeoComputation II
- GeoComputation I
- GeoWeb Services

- Extending ArcGIS Pro w/ Add-Ins
- ❖ Remote Sensing of Environment
- Urban Applications of GIS
- Database Modeling
- ❖ Advanced GIS

TECHNICAL KNOWLEDGE

OS: Windows, Linux, MacOS

Version Control: Git, GitHub, ZenHub

Databases: ArcSDE, PostgreSQL/PostGIS, Microsoft SQL Server

Languages: Python, SQL, HTML, CSS, JavaScript, R, C#

Development Environments: Visual Studio Code, Pycharm, JupyterHub

Software & Frameworks: ArcGIS Desktop Suite, ArcGIS Online, ArcGIS for Developers, ArcGIS Pro SDK, ArcGIS Hub, ArcPy, ENVI, QGIS, Carto, Leaflet, Mapbox, Cessium, GDAL, Tableau, Docker, Pandas, NumPy

PROFESSIONAL EXPERIENCE

NYC Department of City Planning

October 2018 – Present

GIS Specialist

120 Broadway. Manhattan, NY

GIS Specialist working in Enterprise Data Management division to manage agency's spatial data products through scripted automation and assist in troubleshooting GIS/IT related user issues.

- Develop scripted pipelines for distribution of data products internally across agency's network storage infrastructure and externally across various web platforms (ArcGIS Online, Carto, DigitalOcean, various FTP servers) including: LION, MapPLUTO, Digital City Map (DCM), E-Designations, Mandatory Inclusionary Housing (MIH), Building Footprints, Digital Tax Map (DTM), and more.
- Audited various agency platforms for general administrative purposes (service maintenance and data quality compliance) and also in accordance with our open data compliance mandates. Reviewed over 500+ datasets.
- Upgraded agency ESRI infrastructure and developed recurring maintenance process to improve database feature render time by 43%.
- Developed internal SDE monitoring scripts to track and visualize SDE usage, by user, across agency.
- Developed internal Open Data dashboard to monitor usage statistics for agency's publicly available data products.
- Developed internal ESRI License Manager that allowed users to view license availability and request access from other users.
- Maintained updates to The Guide to Planning Resources (internal web platform for sharing data resources across divisions) through combination of MS Sharepoint, ArcGIS Hub, ArcGIS Online, and Github platform management.

NYC Department of Transportation

January 2017 - June 2018

College Aide

55 Water Street. Manhattan, NY

While working under Asset Management division, tasked with maintaining various geodatabases with python scripts to automate regularly modifying tasks in large datasets. Also maintained various MS Access DBs.

- o Increased office workflow efficiency by developing automated scripts for updating File Geodatabases and SDE server repository records for street assets.
- Contributed to the development of a citywide predictive Street Deterioration Model using R, SQL, and Python.
- Managed the analysis of historical commitments for all DOT bridge, street, and facility assets seeking to spatialize and evaluate funding patterns within various political boundaries.
- Led the collection and digitization of all NYC street ownership records. Worked in collaboration with Department of City Planning and the respective City Borough President's Topography Departments. Developed QA process for evaluating digitization metrics.

New York Restoration Project

May 2016 – December 2016

AmeriCorps Environmental Steward 255 Liberty Avenue. Brooklyn, NY

Environmental steward involved in fostering community environment and maintaining garden asset responsibilities in areas of Brownsville, Brooklyn.

 Participated in and planned outreach events, volunteer field projects, and provided technical support and training to community gardeners.

Atlas Environmental Lab

August 2015 - December 2015

Environmental Laboratory Analyst 255 W. 36th St. New York, NY

Laboratory researcher involved with examination of potential asbestos containing materials (ACMs).

• Analyzed bulk and airborne filter samples using stereo, phase-contrast, and polarized-light microscopy and prepared paint, soil, dust wipe, and composited wipe samples for environmental lead analysis via AAS.

Telepathy

September 2014 - August 2015

Programming Intern 68 Jay St. Brooklyn, NY

Personal assistant to independent programmer. Aided in development of mobile applications.

• Tested, debugged, and modified small-scale iOS and Android applications.

The City College of New York

January 2013 - May 2014

Undergraduate Research Assistant 160 Convent Avenue New York, NY 10031

Undergraduate research assistant tasked with the design and implementation of experiments studying interactions between viruses, bacteria and clay particulates.

 Examined biological material interactions and supervised laboratory protocols for proper equipment maintenance and biohazard removal.

CERTIFICATIONS

> Penn State University - Graduate certification in Sustainability, Management and Policy

REFERENCES

References Available Upon Request