

# ADRIAN F. FERRAR

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Geospatial analyst and developer with a solid foundation in GIS, programming, and asset management. Experience solving geospatial problems, automating large dataset upkeep, producing insightful web maps, and collaborating with stakeholders on citywide initiatives.

## EDUCATION

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

**Graduated May 2018**

**The City College of New York: Earth & Atmospheric Science Dept.**  
*Bachelor of Science in Earth System Science, Minor in Economics*

**Graduated May 2014**

## RELEVANT COURSEWORK

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|-------------------------------------|---------------------------------|
| ❖ Quantitative Methods in Geography | ❖ Remote Sensing of Environment |
| ❖ Advanced GeoVisualization         | ❖ Urban Applications of GIS     |
| ❖ GeoComputation II                 | ❖ NYC Water Supply              |
| ❖ GeoComputation I                  | ❖ Database Modeling             |
| ❖ GeoWeb Services                   | ❖ Advanced GIS                  |

## TECHNICAL KNOWLEDGE

**Operating Systems:** Windows, Linux

**Development Environments:** Visual Studio Code, Jupyter Lab/Notebook, Brackets, Emacs

**Languages:** HTML, CSS, JavaScript, Python, R, SQL

**Databases:** PostgreSQL, Microsoft SQL Server

**Version Control:** Git

**APIs, Software and Libraries:** Google Maps, ArcGIS Pro/Map/Catalog, ArcGIS Online, ArcGIS for Developers, ENVI, GDAL/OGR, QGIS, Cesium, Leaflet, CartoDB, Tableau, Docker, Mapbox, GeoPandas, NumPy

## PROFESSIONAL EXPERIENCE

**NYC Department of City Planning**

**October 2018 – Present**

*GIS Specialist*

120 Broadway. Manhattan, NY

Working under Enterprise Data Management division to assure timely and accurate maintenance of all geospatial data products through scripted automation. Unique understanding of inter-agency geo-data pipelines regarding NYC governance and public service utilization.

- Scripted pipeline for dataset conversion from PostGIS tables to ESRI Feature Classes.
- Completing internal Land Use Academy to become familiar with aspects of the zoning resolution guidelines, environmental review procedures, and economic impact analysis.

**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.

- 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.

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**New York Restoration Project**
**May 2016 – December 2016**


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*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.

- Urban community cleaning, restoration, and beautification of open spaces throughout New York City.
- Participated in and planned outreach events, volunteer field projects, and provided technical support and training to community gardeners.

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**Atlas Environmental Lab**
**August 2015 - December 2015**


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*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.
- Prepared paint, soil, dust wipe, and composited wipe samples for environmental lead analysis via Atomic Absorption Spectroscopy (AAS).

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**Telepathy**
**September 2014 - August 2015**


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*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.
- Served as an administrative assistant and managed online social media engagement.

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**The City College of New York**
**January 2013 – May 2014**


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*Undergraduate Research Assistant*

160 Convent Avenue New York, NY 10031

Undergraduate researcher tasked with the design and implementation of experiments studying interactions between virus, bacteria, and clay particulates.

- Examined changes in clay structure because of interactions with biological materials.
- Maintained and supervised laboratory protocols for proper equipment maintenance and biohazard removal.

<b>CERTIFICATIONS</b>
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- Penn State University - Graduate certification in Sustainability, Management and Policy

<b>REFERENCES</b>
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References Available Upon Request