ADRIAN F. FERRAR

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Geospatial professional with knowledge in GIS, programming, networking, and asset management. Experienced in solving geospatial problems, creating data pipelines/ETLs, authoring insightful web maps, and collaborating with stakeholders on citywide initiatives.

EDUCATION

Hunter College: Geography Dept.   **Graduated May 2018**
Master of Science in Geoinformatics

The City College of New York: Earth & Atmospheric Science Dept.   **Graduated May 2014**
Bachelor of Science in Earth System Science, Minor in Economics

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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

Operating Systems: Windows, Linux, MacOS

Version Control & Project Management: Git, GitHub, ZenHub

Databases: ArcSDE, PostgreSQL/PostGIS, Microsoft SQL Server

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

Development Environments: Microsoft Visual Studio Code, Pycharm, JupyterHub

Libraries & Platforms: ArcGIS Online, ArcGIS for Developers, ArcGIS Pro SDK, ArcGIS Hub, ArcPy, Carto, Leaflet, Mapbox, Cessium, GDAL, Docker, Pandas, NumPy

Software: ArcGIS Desktop Suite, ENVI, QGIS, Tableau, Microsoft Teams, Microsoft SharePoint

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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.

- o Develop data pipelines for distribution of products within agency's internal data stores and across various external platforms (ArcGIS Online, Carto, DigitalOcean, FTP servers, etc)
  - o Datasets include: LION, MapPLUTO, Digital City Map (DCM), Zoning Features, E-Designations, Mandatory Inclusionary Housing (MIH), Building Footprints, Digital Tax Map (DTM), and more.
- o Audit agency platforms for REST service maintenance and data quality compliance in accordance with open data mandates. Over 500+ internal and publicly facing datasets.
- o Upgrade agency's ESRI infrastructure and developed recurring maintenance procedures to improve database render performance by 43%.
- o Developed internal SDE monitoring scripts to track and visualize SDE usage, by user, across agency.
- o Developed custom internal ESRI License Manager to allow users the option to view license availability and request access from other users.
- o Maintained updates to The Guide to Planning Resources (internal web platform for sharing data resources across divisions) through combination of Microsoft 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 recurring tasks in large datasets. Maintained various Microsoft Access databases.
- Increased office workflow efficiency through the development of scripted pipelines for updating street asset records in File Geodatabase and SDE server repositories.
- 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 assets/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 of 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

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REFERENCES
References Available Upon Request