Emmett Greenberg

Boston, MA | 617-997-9793 |

| LinkedIn | GitHub

Data Analyst | Urban Informatics

Detail-oriented and technically skilled data analyst with a Master of Science in Urban Informatics and hands-on experience using data to solve real-world urban and policy challenges. Adept in Python, SQL, R, and GIS technologies with a strong foundation in statistical modeling, data visualization, and transportation and housing datasets. Combine analytical rigor with a people-first mindset, delivering actionable insights to support decision-making, equity goals, and operational improvements.

Proven ability to extract, clean, and analyze complex datasets, develop interactive dashboards and spatial visualizations, and collaborate with interdisciplinary teams to communicate findings clearly and effectively. Experienced in both academic and applied settings, including a capstone focused on identifying affordable green housing retrofit opportunities using open data and geospatial methods.

Key Strengths

Data Storytelling & Analysis Stakeholder Collaboration Urban Policy & Metrics Translating Data into Impact Geospatial Analysis
Transportation Planning Analytics
Machine Learning
Statistical Modeling

Dashboard Design Communication French (intermediate) Japanese (beginner)

Technical Proficiencies

- Programming & Scripting: R, Python, Java, SQL, C#, JavaScript, HTML, Bash
- Data Analysis & Visualization: Tableau, Microsoft Excel, Canva, Insight Maker, R (Tidyverse, ggplot2, sf), Python (pandas, Matplotlib, NumPy, seaborn)
- GIS & Spatial Analysis: ArcGIS Pro, ArcGIS Hub, QGIS
- Database Management: SQL Server Management Studio, Oracle SQL Developer, Salesforce
- Development Environments: Visual Studio Code, IntelliJ IDEA, Eclipse IDE, Sublime Text
- Software Testing & DevOps: Selenium, Cucumber, Jenkins, CI/CD Pipelines, JIRA, Agile-SCRUM Methodology

Professional Experience

Northeastern University – Boston, MA

2023 to 2025

FULL-TIME MASTER'S DEGREE STUDENT

Completed intensive, interdisciplinary graduate program focused on the application of data science, spatial analysis, and technology to urban planning and policy challenges. Developed skills in GIS, machine learning, and dynamic modeling to address issues at the intersection of equity, infrastructure, and sustainability.

- Developed advanced skills through coursework in Big Data for Cities, Geographic Information Systems (GIS), Data Mining and Machine Learning, Transportation Modeling and Demand Forecasting, and Dynamic Modeling for Environmental Decision-Making.
- Transportation Modeling: Collaborated on project to predict station-level MBTA ridership with R using open data.
- Capstone Project: Led <u>capstone project</u> titled Affordable Green Retrofits in Mattapan, Boston, aimed at promoting energy-efficient, affordable housing in historically underserved neighborhoods.
 - Analyzed open-source data—building age, property values, energy efficiency ratings, social vulnerability indices, and ownership data—to identify high-priority retrofit sites.
 - Produced and presented findings through an ArcGIS StoryMap, comprehensive written report, and video presentation to communicate insights to policy stakeholders.

Glytec Systems – Waltham, MA

2020 to 2023

SOFTWARE QUALITY ENGINEER / QUALITY ASSURANCE

Tested and validated a web-based medical software platform used in 350+ hospitals to improve insulin management and patient care. Partnered with software engineers and product managers to ensure compliance with business requirements and deliver high-quality user experience in a fast-paced Agile environment.

 Developed and maintained comprehensive test plans, test cases, and test scripts to ensure alignment with clinical workflows and regulatory standards.

- Designed and executed automated functional end-to-end tests using Java, Selenium, and Cucumber; supplemented coverage with manual testing as needed.
- Collaborated cross-functionally to validate feature delivery, manage lifecycle changes, and support iterative releases.
- Continuously enhanced test coverage by proactively identifying gaps and expanding the test suite to ensure full alignment with evolving business requirements.
- Documented, tracked, and reported defects, test results, and quality metrics to ensure high system reliability and user satisfaction.

Visible Body - Newton, MA

2017 to 2020

SOFTWARE QUALITY ASSURANCE SPECIALIST

Tested and improved mobile and web-based educational health science applications used by over 250,000 students. Collaborated with cross-functional teams to ensure product quality, usability, and alignment with educational goals throughout the software development lifecycle.

- Created, executed, and maintained detailed test plans and test cases to validate functionality, user interface, and overall system performance.
- Conducted manual and end-to-end testing to ensure continuous functionality and design consistency across multiple
 platforms. Contributed to enhanced user experience by identifying critical usability issues early in the release process.
- Worked closely with product managers and developers to define testing goals, prioritize fixes, and resolve issues throughout Agile development cycles.
- Supported Scrum team planning and sprint execution to improve team productivity and delivery quality.

Education & Professional Development

Master of Science (M.S.) in Urban Informatics
Northeastern University, Boston, MA | May 2025 | GPA: 3.86

Master of Science (M.S.) in Software Development Boston University Metropolitan College, Boston, MA | GPA: 3.55

> Bachelor of Arts (B.A.) in Language and Linguistics Minors: Computer Science, Mathematics Brandeis University, Waltham, MA GPA: 3.57

Training

Joining Data with pandas | Introduction to Data Visualization with Seaborn | Intermediate Importing Data in Python Data Manipulation with dplyr | Data with dplyr | Introduction to GitHub Concepts | Foundations of Git

Work Study & Internships (2013 to 2016)

Sports Information Assistant

Brandeis University – Waltham, MA

- Interpreted and compiled statistics at athletic events, producing comprehensive post-game recaps.
- Organized, updated, and digitized athletic information using Excel, ensuring accurate and accessible records.

Informatics Research Assistant

Boston Children's Hospital - Boston, MA

- Conducted linguistic analysis of medical records to identify key patterns and insights.
- Developed and implemented BASH scripts to efficiently organize and manage medical record storage.

Computational Linguistics Research Assistant

Brandeis University - Waltham, MA

- Annotated text files for the Chinese Treebank, a Chinese language machine-learning project.
- Analyzed syntax and semantics of English language data.

Volunteer Work

Livable Streets Alliance – Cambridge, MA

Summer 2024

 Organized, analyzed, and visualized qualitative and quantitative data sets for Columbia Road Transportation Action Plan using R and Excel.