# Jared R. Lieberman

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### **Professional Experience**

Eurasia Group | New York, New York | June 2024 - Present

Quantitative Research Intern to Contractor (part-time), Macro-Geoeconomics

- Automated a political risk index by replicating and enhancing the manual process, resulting in a fully automated pipeline that reduced processing time from several weeks to 15 minutes and improved statistical accuracy
- Developed and implemented statistical and methodological improvements to risk assessment models, including multivariate normal imputation and factor analysis for dimensionality reduction
- Designed and built a relational SQLite database, migrating from Excel-based SharePoint files; developed schema and relationships to support dashboarding and improve data accessibility for analysts
- Built a new Reform Index for Success and Effectiveness (RISE) by combining quantitative and qualitative data to evaluate emerging market reforms
- Created and delivered training materials to onboard and upskill new team members on the automated pipeline and data science methodologies

### Fulbright-Nehru Research Fellow | Delhi, India | April 2022 - January 2023

Affiliated with the Trivedi Centre for Political Data at Ashoka University

- Conducted extensive data analysis and developed statistical models for independent research project on electoral politics titled "The Incumbency Disadvantage: A Data-Driven Approach to Understanding Public Service Delivery"
- Executed comprehensive exploratory data analysis, and constructed statistical models to uncover causal factors contributing to relatively larger voter participation in local Indian elections
- Conducted in-depth fieldwork, which included interviewing Indian Members of Parliament and Legislative Assemblies, gaining valuable insights into the intricacies of the political landscape
- Constructed a comprehensive dataset through archival research, documenting the duration of all Indian state and national campaigns since 1951, providing a valuable resource for future political analyses

## Commonwealth of Massachusetts | Chelsea, MA | August 2019 - January 2022

Data Scientist, Department of Revenue

- Developed statistical and machine learning models, including Random Forest, ensemble classifiers, and regression techniques, in addition to implementing anomaly detection algorithms
- Utilized Python, R, and SQL for extensive data preprocessing, model training and evaluation, building automated data pipelines, and improving databases to support critical state tax initiatives
- Spearheaded and managed full-stack software development efforts to enhance and maintain an internal cloud-based web application hosted on AWS. This application leveraged federal financial data to equip employees with comprehensive resources for taxpayer research
- Implemented the construction of APIs, optimized storage in AWS S3 and DynamoDB, conducted intensive user experience (UX) research, and resolved bugs that increased data collection efficiency from 60% to over 99%, ensuring the availability of all required data
- Winner of the 2021 Commonwealth Citation for Outstanding Performance Award

### NYC[x] Innovation Fellowship | New York, New York | August 2020 – December 2021

Data Innovation Fellow, Mayor's Office of the Chief Technology Officer, U.S. Digital Response

- Conducted descriptive and predictive analyses, created interactive maps, and built informative dashboards in Tableau in collaboration with the Office for the Prevention of Hate Crimes. Identified high-risk neighborhoods for hate crimes and underreporting, contributing to data-driven decision-making for targeted intervention strategies
- Assisted the Department of Cultural Affairs by conducting a comprehensive data audit of the \$47 million cultural grant funding allocation process. This audit led to streamlined processes and greater transparency in resource allocation

#### **Education**

Columbia University | New York, NY

Master of Arts, Statistics | GPA: 3.71 Expected Graduation Date: May 2025

## Tufts University | Somerville, MA

Bachelor of Science, Computer Science Minor: Political Science | May 2018 | Dean's List

#### Skills

**Programming Languages/Frameworks:** Python (pandas, sci-kit learn, NumPy), R, SQL, ReactJS, HTML5, CSS, C/C++ **Skills:** AWS, Git/GitHub, Jupyter, Tableau, ArcGIS, Kepler.gl, Carto, Microsoft Azure, ETL, MS Office