Shriyansh Singh

+1-930-333-5141 | **shriyansh.singh24@gmail.com** | **LinkedIn**

SUMMARY

Transportation Data Scientist with expertise in **data collection** and **statistical analysis** for urban mobility initiatives. Experience developing **geospatial visualizations** and translating complex data insights into **policy recommendations** for diverse stakeholders and community groups.

PROFESSIONAL EXPERIENCE

Urban Mobility Analyst *April 2024 - Dec 2024*

Hyphenova Urban Solutions *Los Angeles, CA*

- **Developed** comprehensive **data collection programs** for tracking micromobility usage patterns across urban corridors, establishing baseline metrics for infrastructure planning
- **Created** interactive **GIS maps** using **ArcGIS** and **Python** that visualized cycling infrastructure, usage patterns, and safety hotspots for city stakeholders and community presentations
- **Conducted** statistical analysis of pre/post street improvement projects that quantified 32% increase in cyclist safety, informing future infrastructure investment decisions
- **Collaborated** with community groups and city agencies to translate technical findings into accessible presentations that effectively communicated transportation policy recommendations

Transportation Data Specialist *May 2022 - Oct 2022*

Urban Transportation Research Institute *Mumbai, India*

- **Designed** and **maintained** centralized databases for multimodal transportation counts using **SQL** and **Python**, enabling consistent analysis of travel patterns
- **Implemented** automated data collection systems that increased accuracy of bicycle traffic monitoring by 47% while reducing manual counting requirements
- **Analyzed** transportation safety data using statistical models in **Python** and **R** that identified high-risk corridors for prioritizing infrastructure improvements
- **Communicated** complex transportation trends to non-technical audiences through clear data visualizations and policy briefs that informed urban planning decisions

TRANSPORTATION RESEARCH PROJECTS

Bicycle Infrastructure Impact Analysis | *Python, ArcGIS, PowerBI, Statistical Modeling* *Jan 2024 – Apr 2024*

- **Designed** comprehensive evaluation framework that quantified the impact of bike lane installations on safety metrics, modal share, and economic activity
- **Developed** interactive **PowerBI dashboards** and **ArcGIS web maps** that enabled stakeholders to explore spatial relationships between infrastructure investments and usage patterns
- **Created** statistical models using **Python** that controlled for confounding variables when analyzing safety improvements, producing rigorous evidence for policy decisions

Micromobility Data Collection System | *Python, JavaScript, leaflet.js, SQL, AWS* *Sep 2023 – Dec 2023*

- **Built** automated data collection system using **Python** and **AWS** services that aggregated micromobility trip data from multiple providers into unified database
- **Implemented** interactive mapping platform with **JavaScript** and **leaflet.js** that visualized trip patterns, demand hotspots, and infrastructure gaps
- **Developed** analytical reports that translated complex mobility patterns into actionable insights for planners, identifying priority areas for infrastructure investment

TECHNICAL EXPERTISE

Data Analysis: Python (pandas, NumPy, folium), **R**, **SQL**, Statistical Modeling, Regression Analysis
Geospatial Tools: ArcGIS, QGIS, **leaflet.js**, GeoPandas, PostGIS, Spatial Analysis
Data Visualization: PowerBI, Tableau, Matplotlib, Seaborn, D3.js, ggplot2
Web Development: JavaScript, HTML/CSS, Flask, Dash
Other Technical: Excel, **PowerPoint**, **Adobe Creative Cloud** (Illustrator, InDesign), **Git**, AWS
Transportation: Bicycle/Pedestrian Planning, **Micromobility Analysis**, Safety Analysis, Complete Streets

EDUCATION

Indiana University Bloomington Aug 2023 – May 2025

Master of Science in Data Science *Indiana, United States*

- Specialization: Urban Analytics and Transportation Planning
- Coursework: Spatial Statistics, Policy Analysis, Urban Transportation Systems, Economics of Public Policy