

Ran Li

📍 Philadelphia, PA 19121
🌐 ranli.dev

📞 (732) 762-4168
🌐 Ran Li | LinkedIn

✉ ranli2011@gmail.com
🔗 github.com/ran-codes

Experience

Data Scientist **Urban Health Collaborative** **Feb 2023 - Present**

- Spearheaded the development of an integrated research infrastructure that streamlines data management, provenance tracking, and cross-core interoperability (administrative, research, training, and engagement)
- Leveraged interdisciplinary engineering expertise in web development to enhance visibility of complex data insights
- Developed R packages to strengthen research reproducibility and implemented modern data warehousing to optimize data pipeline efficiency

Analytics Engineer **Urban Health Collaborative** **Feb 2022 - Feb 2023**

- Designed and developed data warehousing systems and user interfaces for the SALURBAL and HCUP projects
- Served as direct supervisor for a web development team and led data/metadata standardization working groups
- Implemented scalable data infrastructure solutions for multi-core research operations

Data Analyst **Urban Health Collaborative** **Mar 2020 - Jan 2022**

- Developed data-driven web applications using R Shiny, React.js, and Next.js for COVID-19 data visualization
- Built ETL pipelines to process and transform large-scale health datasets
- Created interactive dashboards that enhanced data accessibility for research teams and stakeholders

Research Assistant **Urban Health Collaborative** **Nov 2018 - Mar 2020**

- Applied Mixed Models to analyze health outcome scaling across US Metropolitan Areas
- Conducted comprehensive data analysis, visualization, and manuscript preparation for peer-reviewed publications
- Collaborated with interdisciplinary research teams on urban health initiatives

Education

M.S. in Biostatistics **Sep 2018 - Mar 2020**

Drexel Philadelphia, *Cumulative Thesis: Error Propagation and Uncertainty in the Association Between PM2.5 and Life Expectancy*
UniversityPA GPA: 4.0

B.S. in Biotechnology/Bioinformatics **Sep 2013 - Dec 2015**

Rutgers University New Brunswick, NJ Cumulative GPA: 3.4

Skills

Programming Languages:  R,  Python,  JavaScript /  TypeScript,  HTML /  CSS

Data Science & Analytics: R Packages, Shiny, Quarto, DBT, DuckDB, Mixed Models, Statistical Analysis

Web Development: React.js, Next.js, Svelte.js, Node.js, Azure Functions

Tools and Platforms: Git, GitHub, Notion, Obsidian, Linux

Publications

P1 **findSVI: an R package to calculate the Social Vulnerability Index at multiple geographical levels**

Xu H, [Ran Li](#), Bilal U

Journal of Open Source Software, 2024

P2 **Area-Level Social Vulnerability and Severe COVID-19: A Case-Control Study Using Electronic Health Records**

Mullachery PH, Bilal U, [Ran Li](#), McClure L

Journal of Urban Health, 2024

P3 **Heterogeneity in Disparities in Life Expectancy Across US Metropolitan Areas**

Purtle J, [Ran Li](#), Diez Roux A, Bilal U, Mullachery PH, Schnake-Mahl A

Epidemiology, 2022

P4 **Inequities in spatial accessibility to COVID-19 testing in 30 large US cities**

Mullachery PH, [Ran Li](#), Melly S, Kolker J, Diez Roux A, Barber S, Bilal U

Social Science & Medicine, 2022

P5 **COVID-19 Outcomes Among the Hispanic Population of 27 Large US Cities, 2020–2021**

De Ramos IP, Lazo M, Schnake-Mahl A, Ran Li, Martinez-Donate A, Diez Roux A, Bilal U
American Journal of Public Health, 2022