

CHRISTOPHER PRENER

📍 St. Louis, Missouri

I am **data scientist** passionate about bringing an **enterprise mindset** to problem-solving and developing data and software products that accelerate the production of insights and evidence. I specialize in **health disparities, geospatial** mapping, and spatial analyses. I am an **open science** advocate and an avid **R programmer** with expertise in data processing, visualization, and communication as well as **open source research software engineering**.

🎓 Education

- 2015 ● **Northeastern University** 📍 Boston, MA
Ph.D. in Sociology
- 2010 ● **Northeastern University** 📍 Boston, MA
M.A. in Sociology
- 2008 ● **St. Lawrence University** 📍 Canton, NY
B.A. in Sociology and History
Honors, Magna Cum Laude, Phi Beta Kappa

🏢 Professional Experience

- 2024 ● **Director, RWE Digital Platforms**
Pfizer, Inc.
 - Ran work stream to develop reproducibility guidelines for real world evidence generation.
 - Developed 2 public and 1 internal R packages as well as 4 Shiny data hubs to furnish asset teams with self-service analytics.
- 2022 ● **Director, Vaccines RWE Biocurator Scientist**
Pfizer, Inc.
 - Created a first-in-industry platform for integrating two states' COVID vaccine registries with closed claims and mortality data, representing nearly 35 million lives
 - Led spatial epidemiology studies to identify health disparities in Lyme disease as well as influenza, COVID and meningococcal vaccinations
- 2016 ● **Assistant Professor, Sociology** 📍 St. Louis, MO
Saint Louis University
 - Taught courses on statistics, spatial data analysis, and health disparities, winning 4 teaching and mentoring awards
 - Maintained a 2 year long open source COVID-19 [data project](#), [website](#), and [newsletter](#) highlighting outcomes and spatial patterns in Missouri




📶 Connect

- ✉ chris.prenner@gmail.com
- 🌐 chris-prenner.github.io
- 👤 github.com/chris-prenner
- 👤 [Google Scholar](#)
- 🌐 [LinkedIn](#)

⚙️ Skills


- Statistical analysis, including multivariable, multi-level, and spatial modeling using R
- Qualitative data collection and analyses for ethnographic field work and interview data
- Data acquisition, including via web scraping and API access
- Geospatial data management and creation as well as map production and data visualization in R, leaflet, ArcGIS, and QGIS
- Interactive report development with Quarto and RMarkdown
- Advanced R programming and package development
- Project management with Git and GitHub


- 2015 ● **Non-Tenure Track Instructor, Sociology**  St. Louis, MO
Saint Louis University
 - Built a student research team focused on creating novel data sets to address social science research questions in St. Louis
 - Launched a data science seminar series to provide training in R, RMarkdown, Git, and other open science tools that served 30-50 learners per year


- 2012 ● **Research Assistant**  Boston, MA
Northeastern University, Institute of Urban Health Research
 - Devised iPad-based data collection tools for interviewing and psychometric testing to accelerate data analysis in an NIH-funded R01 study with 300 participants
 - Established standardized procedures for medical record data reviews and electronic health records data integrations


- 2008 ● **Teaching Assistant**  Boston, MA
Northeastern University
 - Taught 2 sections (50+ students) of introductory statistics and 1 section (40+ students) of an urban sociology course as the instructor of record from 2011 to 2012
 - Supported instructors' teaching goals in four classes with 50 to 500 students per course for an addition 6 courses for 2008 to 2011

Selected Publications

- 2022 ● **Medicine at the Margins: EMS Workers in Urban America**
Fordham University Press
Prener, C.  [Publisher](#)

- 2021 ● **Excess mortality in the United States in 2020: Forecasting and anomaly detection.**
American Journal of Infection Control 49.9: 1189-1190.
Wiemken, T. L., et al.  [Full Text](#)

- 2021 ● **Measuring the Effect of Place, Socioeconomic Status, and Racism on Coronary Heart Disease: Recent Trends and Missed Opportunities.**
Current Epidemiology Reports 8.4: 190-199.
Prener, C., S. Gebauer, and K. L. Gilbert.  [Full Text](#)

- 2021 ● **SARS-CoV-2 screening testing in schools for children with intellectual and developmental disabilities.**
Journal of Neurodevelopmental Disorders 13.1: 1-11.
Sherby, M. R., et al.  [Full Text](#)

Package Portfolio

- [areal](#) - areal weighted interpolation
- [biscale](#) - bivariate mapping with ggplot2
- [deprivateR](#) - unified API for calculating measures of socioeconomic inequality using U.S. Census Bureau data (*GitHub* only)
- [censusxy](#) - batch geocoding with the U.S. Census Bureau API (*GitHub* only)
- [qualmap](#) - opinionated approach qualitative GIS in R
- [testDriveR](#) - data and a RMarkdown template for teaching
- [zippeR](#) - tools for cross walking USPS ZIP Codes with Census Bureau geographies, including counties and ZCTAs

All Publications

See [my website](#) for a full list of Peer reviewed publications