



Science in Service
of Cities.

Job Title: Research Analyst (Social Network Analysis Specialty)

Reporting To: Director of Data and Analysis

Job Requisition: JR20004

Projected Start Date: ASAP

Who We Are

In cities across the country, people face high rates of gun violence, under-resourced schools, and social harms associated with the criminal justice system — all of which disproportionately impact people of color. These inequalities have profound consequences for public safety and opportunity. As a society we have failed to address these challenges, in part, because of our lack of understanding of the most effective and cost-effective solutions that can have a real impact on people's lives. We believe that rigorous research can help.

The University of Chicago Crime Lab and Education Lab partner with cities and communities to use data and rigorous research to design, test, and scale programs and policies that enhance public safety, improve educational outcomes, and advance justice. Our mission is to combine world-class data science and research, in partnership with government agencies, to substantially improve the effectiveness of the public sector and achieve impact at scale.

To learn more about the Crime Lab and Education Lab, visit

<https://urbanlabs.uchicago.edu/labs/crime>.

The Role

The UChicago Crime Lab and Education Lab are seeking Research Analysts with strong social network analysis and causal inference skills to work on large-scale social policy research projects designed to reduce crime and improve educational outcomes.

The successful candidate will have experience in working with large administrative datasets, network analysis including applying network causal inference tools, and applying a variety of statistical modeling and data analysis techniques to datasets in real-world settings. From project inception to delivery, the Research Analyst will contribute to all facets of data collection and cleaning, model development, and implementation.

This position requires an individual who is able to work as a part of a small research team running many distinct analyses concurrently. It offers the opportunity to work directly with leading social policy researchers at the University of Chicago and University of Michigan, local

city agency staff, as well as a team of administrative staff, other analysts, research managers, and student research assistants.

Duties and Responsibilities

- Conducts social network analysis on large administrative datasets
- Works with partners and members of the research team to propose and implement analytical approaches to solving specific research questions
- Cleans, transforms, merges, and matches between large, messy, and complex research and administrative datasets
- Build and visualize large networks using administrative datasets and geographical information
- Build statistical models using large networks and implement causal inference tools specific to these settings
- Build and estimate economic models of behavior transmission across social networks
- Prepare results for memos, presentations, and academic papers targeting both policymakers and researchers
- Assist with literature reviews and drafting papers
- Other duties as assigned

Education

Master's degree preferred, Bachelor's degree required, in economics, public policy, statistics, computer science, or a closely related field.

Experience

- A minimum of one year of relevant research experience required. Experience gained in school counts towards requirement.
- Experience working with statistical programming languages required. R is strongly preferred (e.g., 'igraph', 'network' or similar packages). Other languages such as Python and Stata are also valued, especially if this includes experience with social network analysis.

In addition, though none of the following are required for the position, candidates are encouraged to highlight experience in the following areas:

- Working with network data/conducting network analysis
- Working with large, complex, and/or administrative datasets
- Working with field experiments or randomized controlled trials
- Program evaluation methods (e.g., difference-in-differences, propensity score matching, regression discontinuity)
- Creating data visualizations

- Conducting power analysis
- Experience with network econometrics or causal inference under interference
- Experience with cleaning, geo-coding, and analyzing address information
- Other pre-doc or research assistant positions in economics or related fields

Competencies

- Strong interest in data analysis required
- Strong interest in social policy, especially crime and education policy, required
- Strong quantitative skills required
- Ability to manage multiple projects simultaneously and meet tight deadlines required
- Excellent organizational skills and attention to detail required
- Ability to work both independently and as a team member required
- Ability to work carefully with sensitive and confidential data required
- Knowledge and understanding of crime, violence and/or education policy and research literature preferred
- Strong communication and writing skills including clear communication of quantitative methods preferred

To Apply

We seek a diverse pool of applicants who wish to join an academic community that places the highest value on rigorous inquiry and encourages a diversity of perspectives, experiences, groups of individuals, and ideas to inform and stimulate intellectual challenge, engagement, and exchange.

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, protected veteran status or status as an individual with disability.

The University of Chicago is an Affirmative Action / Equal Opportunity / Disabled / Veterans Employer.

Please submit a resume, cover letter, and reference contact information to UChicago's Workday system. Within the Workday system, this listing can be found by the position title or by the requisition number, **JR20004**.

If you have an active UChicago Workday account, you will need to complete the Internal Candidate application process. Simply log in to Workday and select the career worklet to begin.

External candidates should apply at <https://uchicago.wd5.myworkdayjobs.com/External>.

If you have questions about the Workday system, please contact our Shared Services department at <https://services.uchicago.edu>

Job seekers in need of a reasonable accommodation to complete the application process may contact the Shared Services Office by calling 773-702-5800 or by emailing sharedservices@uchicago.edu with their request.