Job Title: Senior Data Scientist  
Location: Chicago, Illinois  
Terms of Assignment: Full-time

About Crime Lab:  
The U.S. has the highest rate of homicide among any developed nation in the world. The U.S. also has by far the highest rate of incarceration among any high-income nation, with over 2.2 million people currently incarcerated nationwide. Both of these problems disproportionately affect our most economically disadvantaged and socially marginalized communities. Taken together, all levels of government in the U.S. spend well over $200 billion per year on the criminal justice system (including police, courts, and corrections). Yet we have made little long-term progress on these problems. The homicide rate in America today is about the same as it was in 1950, or even 1900. This stands in stark contrast to the enormous progress the U.S. has made toward reducing mortality rates from almost every other leading cause of death. One key reason we have not made more progress on these problems is a striking lack of rigorous evidence about what actually works, for whom, and why. The University of Chicago Crime Lab aims to change this by doing the most rigorous research possible in close collaboration with city government and non-profits. Using randomized controlled trials, insights from behavioral economics, and predictive analytics, the Crime Lab partners with government agencies and frontline practitioners to help cities identify, design, and test the policies and programs with the greatest potential to reduce crime, improve education, and maximize the social good per dollar spent.

The Crime Lab is part of the University of Chicago’s Urban Labs, a set of highly synergistic labs focused on undertaking inquiry and having impact on five essential dimensions of urban life: crime, education, health, poverty, and energy & environment. For more information about the Crime and Education Lab and the Urban Labs, please visit https://urbanlabs.uchicago.edu/.

Job Summary:  
The University of Chicago Crime Lab team is seeking a senior data scientist to work on our portfolio of projects applying machine learning and econometrics to pressing challenges in public policy, education and criminal justice. The senior data scientist will work on all aspects of a project - ranging from raw data cleaning and basic descriptive analysis to developing robust predictive models and evaluating the effects of public policies. Working with PhD-level computer scientists and economists, the senior data scientist will also have the opportunity to mentor other project staff and to contribute to the scientific-direction of our projects. The senior data scientist will also have the opportunity to serve as the in-house expert on some tools and techniques that are shared across a number of projects at our offices in New York and Chicago. This position offers the opportunity to work directly with leading researchers and policy-makers on projects with immediate real-world impact.
Responsibilities:

- Lead data analysis and data management on a small portfolio of research projects
- Build and rigorously evaluates statistical models using best practices of machine learning and statistical inference
- Contribute to the design and implementation of an efficient and reproducible data processing pipeline
- Work with partners and members of the research team to propose and implement analytical approaches to solving specific research questions
- Prepares project memos, summaries, presentations, reports, and other work products for dissemination targeting both policymakers, academic researchers, and other stakeholders, as needed
- Presents work products to external partners as appropriate
- Mentors other research staff by providing guidance and feedback on deliverables and quality assurance on code
- Serves as an in-house expert for one or more tools or techniques used across multiple projects in the labs
- Partners with the Talent Manager to help recruit, screen, and hire new talent, and creates data exercises and other recruitment and onboarding tools

Competencies:

- Advanced knowledge of machine learning
- Advanced skills with statistical data analysis using Python or R
- Demonstrated ability in the development and maintenance of modular and reproducible project code
- Knowledge of econometric techniques for causal inference
- Strong interpersonal skills
- Strong initiative and a resourceful approach to problem solving and learning
- Ability to work independently and as part of a team in a fast-paced environment
- Sound critical thinking skills
- Strong attention to detail with superb analytical and organization skills
- Excellent written and verbal communication skills, with the ability to present data in a simple and straightforward way for non-technical audiences

Education, Experience, and Certifications:

- Bachelor’s or master’s degree in computer science, economics, statistics, data science, or a closely related field
- 2+ years experience in developing code for prediction projects

Required Documents:

- Resume
- Cover letter
- A sample of data work, such as a final report for a class project, link to a GitHub repo, or blog post

To Apply: please submit a resume, cover letter, and sample of data work to UChicago’s Workday System, requisition number JR06377. Please find instruction on how to access the application below. Note: When applying all materials MUST be uploaded to the resume/CV section. This job description is formatted differently on the Workday system.
If you have questions about the Workday application system, please contact: https://uchicago.service-now.com/sso?id=ssc_sc_cat_item&sys_id=cf359d671316660030c0bca3244b02d.

If you have an active UChicago Workday employee account, you will need to complete the Internal Candidate application process. Internal Candidate instructions: Log into Workday and select the career worklet.

External Candidates should apply to the specific Lab at https://uchicago.wd5.myworkdayjobs.com/en-US/External

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Staff Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-5800 or submit a request via Applicant Inquiry Form.