

# Research Statement

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The driving force behind my work is understanding how institutions and public policies affect economic outcomes and urban life. Two critical factors that shape a neighborhood -and the focus of my research- are crime and discrimination. I am an applied microeconomist that uses quasi-experimental and experimental data and expands the traditional econometric tools with advances in computer science, big data, and machine learning.

In my Job Market Paper, *Can't Stop the One-Armed Bandits: The Effects of Access to Gambling on Crime and Property Values*, I focus on the consequences of a significant increase in access to gambling. I use the quasi-experimental variation in the availability of video gambling introduced by a 2012 Illinois law. I show that a bill aimed to increase tax revenue instead results in increases in crime and lower property values. This has important implications for policymakers and local governments: any increase in tax revenues from gambling may be offset by increases in crime and reduction in property tax revenues. The interaction between gambling and crime brought to my attention the complementary role that may exist between amenities and safety. In the paper, *Unlocking Amenities: Complementarities in Public Good Consumption* (Accepted at Journal of Public Economics), my coauthors and I explore complementarities between public goods. Our results suggest that ignoring may lead to (i) undervaluing the potential value of public goods, (ii) misinterpreting heterogeneity in preferences, and (iii) understating the value of public goods to minority households that tend to live in unsafer neighborhoods.

I believe that understanding why crime happens and ways to increase public safety is central to improve neighborhood life. In the paper, *Emotional Cues and Crime: Spatial and Temporal Evidence from Brazilian Soccer Game* (R&R at Economic Inquiry), we explore the role of that emotion may play in the decision of committing a crime. Our findings not only confirm the role of emotions in crime but also suggest that emotionally cued perpetrators of non-violent crimes may also respond to rational incentives compared to their violent crime counterparts. Understanding why crime and where it happens can also give insights on policies to reducing it. In the article *Do More Eyes on the Street Reduce Crime? Evidence from Chicago's Safe Passage Program* (Journal of Urban Economics, 2019), we examined the effectiveness an alternative way of policing: hiring community members to guard schools for a few hours each day. We show that this program is not only an efficient and cost-effective way of reducing crime but also of increasing school attendance.

As I made progress on my research of crime, a continuous feature that I encountered is that minorities tend to live in lower opportunity neighborhoods and be more exposed to crime. This naturally evolved in the curiosity to understand the factors behind neighborhood location choices by minorities. In the paper, *Housing Discrimination and the Pollution Exposure Gap in the United States*, we conducted a large-scale experiment to identify the role of discrimination in the pollution exposure gap between minority and white households. Using a fully automated computer bot, we conducted a large-scale correspondence experiment on a major rental housing website in markets with significant sources of toxic emissions. Within-property tests indicate that minority renters are less likely to receive responses in low exposure locations, while there are no differential response rates at high exposure locations in the same market. By providing direct evidence on the link between housing discrimination and the racial gap in pollution exposures, this study suggests that reducing illegal, discriminatory behavior could be important for reducing the racial disparity in exposures to airborne chemical toxins. This paper is part of a broader collaboration on discrimination in housing markets with Peter Christensen and Chris Timmins. As part of this project, I will be studying the heterogeneity in discrimination in the rental market in major metropolitan markets in the US, both across cities and in the central city versus suburban neighborhoods. Our initial evidence from Atlanta suggests that minorities face higher discrimination rates in high amenity central areas than in suburban neighborhoods. These factors play an important role in location decisions and are essential to understand if minority renters face constraints to locate in central cities due to discrimination.

Looking forward, I plan on exploring more the role of discrimination in neighborhood exposure to crime. Moreover, I am at the early stages of designing a second large scale experiment. I plan on using the experimental data and structural estimation methods to understand and identify willingness to pay for crime.