Applied Geography Special Issue – Call for Papers

Geography of Crime: Spatial Insights for Crime Analysis and Prevention

Crime incidents tend to be spatially clustered: while most areas remain crime-free, a disproportionately small number of locations account for the majority of criminal activity. Identifying and effectively managing these high-crime areas can significantly reduce overall crime levels. The geography of crime explores these spatial patterns and the factors that contribute to them. Specifically, it examines how factors such as location, land use types, concentration of points of interest, environmental design, and social structures influence crime opportunities. Despite extensive research, crime remains a complex and evolving social issue, with notable knowledge gaps in both geography and criminology. As an inherently integrative discipline, geography excels at synthesizing knowledge from various fields with a spatial focus. Emerging advancements in spatial science and regional science—such as GeoAI, Spatial Big Data, Human Mobility, Unmanned Aerial Vehicles (UAVs), and Digital Twin—have the potential to address these research gaps from a geographic perspective. This special issue seeks to further promote the integration of applied geographic technologies with criminological theories, helping practitioners understand the spatial concentration of crime and, more importantly, transforming methodological and theoretical insights into practical, effective crime prevention strategies and policy implications. By doing so, we can collectively work toward tackling this pressing social issue.

Topics under consideration

1. Emerging data sources for crime mapping, human mobility, socioeconomic status, and other relevant factors.
2. Innovative approaches for generating more dependable and consistent outcomes in hotspot detection and crime prediction.
3. New perspectives on working theories and effective crime prevention strategies that address real-world challenges.
4. Novel theories, policy implications, and strategies for enhancing knowledge exchange between academia, law enforcement agencies, and local communities.
5. AI-driven or machine learning models-based crime prediction models with spatial big data: explore how GeoAI and machine learning algorithms can integrate spatial big data, human mobility patterns, and environmental design factors to enhance hotspot detection and predict future crime trends.

Submission Deadline for Abstracts (350-500 words): May 15, 2025

Abstracts should be submitted via email to minxuan.lan@utoledo.edu. Decisions on abstract submissions will be made by May 31, 2025, and authors will be informed of the

outcome shortly thereafter. Full papers will be due by December 15, 2025. For any inquiries regarding this special issue, please contact the guest editors (see contact details below):

Guest Editors

- Minxuan Lan, PhD. Assistant Professor of Geography and Planning. The University of Toledo. Minxuan.lan@utoledo.edu.
  Minxuan Lan is a human geographer with backgrounds in GIS, spatial statistics, crime science, public health, and big data mining. He is the director of the Spatial Social Science Research Lab at The University of Toledo. He is particularly intrigued by the possibility of using interdisciplinary theories and methods to solve real-world problems.
  Homepage: https://www.utoledo.edu/al/geography/facultystaff/deptfaculty/lan.html

- Lin Liu, PhD. Professor of Geography. University of Cincinnati. liuln@ucmail.uc.edu.
  Lin Liu is a Professor of Geography at the University of Cincinnati and is also the Co-Director of the Joint Center of GIS and Spatial Analysis. His research interest includes spatial interaction modeling, crime analysis and simulation modeling, location analysis, spatial data mining, geographic visualization, and environmental modeling.
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- YongJei Lee, PhD. Assistant Professor of Criminology. University of South Florida. lee224@usf.edu.
  YongJei Lee is an Assistant Professor in the Department of Criminology at the University of South Florida. His current research examines place management theory, police effectiveness, spatio-temporal patterns of crime hot spots, crime hot spot forecasting, measures of crime concentration, and machine learning models for recidivism forecasting.
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- Meredith Gore, PhD. Professor of Geographical Science. University of Maryland. gorem@umd.edu.
  Meredith Gore works to advance knowledge about "nature crime" and conservation criminology including wildlife trafficking, illegal fishing, and illegal logging. In particular, she is curious about the socio-environmental causes and consequences of nature crimes and how crime prevention strategies can be designed and implemented for positive socio-environmental benefit.
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