Structure and dynamics of crime

Special issue in the Applied Network Science journal.

Crime is ubiquitous and poses a real danger to modern societies. Recent advances in fields such as criminology, sociology, physics, computer science, mathematics, and police science have shown that criminal activities depend strongly on the underlying network of actors involved. In this sense, the application of network science to crime fighting has shown a great boom in the last few years, establishing a strongly interdisciplinary community, which has attracted attention not only from academia but also from law-enforcement and intelligence agencies worldwide.

Network science has been reshaping the way we think and approach the criminal phenomenon from basic to applied analysis. In this regard, this special issue aims to collect innovative research on the networked structure and dynamics of crime, paving the way to a clearer data-driven understanding of criminality with potential applications to crime fighting.

Papers of broader aspects of crime and their applications will also be considered as possible contributions for this special issue. Survey and review papers are welcome. Manuscripts relevant to this special issue include, but are not limited to, the following:

- description of criminal networks,
- data-mining for intelligence purposes,
- modeling crime interactions,
- dynamics of terrorist events,
- disruption of illicit markets,
- structure of criminal enterprise groups,
- understanding crime as a complex system,
- social dynamics and structure of transnational crime,
- social dynamics of criminal hotspots in cities,
- use of social media for crime analysis,
- dynamics of cyber-crime,
- use of communication data in criminal activity,
- detection of criminal organizations in cities,
- social network analysis of co-offending,
- network-based tools for analyzing crime,
- sensitivity analysis to investigate missing data and fuzzy boundaries,
- spatial networks and their influence on crime patterns,
- visualization of criminal networks.
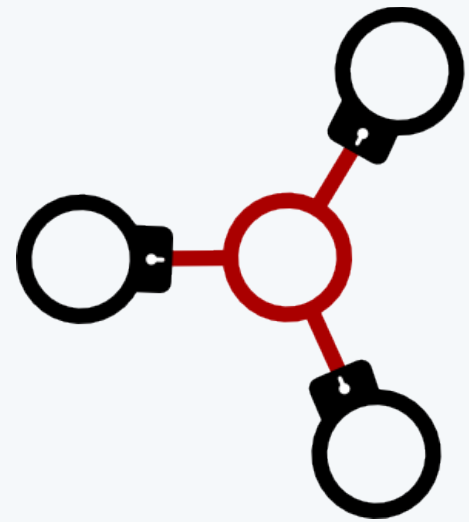
Important dates

Expression of interest and abstract submission: August 23, 2019
Abstract feedback notification: September 6, 2019
Paper submission deadline: October 18, 2019

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