Predictive Policing

Predictive policing refers to the use of analytical techniques to make statistical predictions about potential criminal activity. The basic underlying assumption of predictive policing is that crime is not randomly distributed across people and places, holding that big data can be used to forecast when and where crimes may be more likely to occur, and which individuals are likely to be victims or perpetrators of crimes.

- Predictive policing has four key stages: data collection, analysis and prediction, police intervention, and target response.

- Location-based prediction is the most common form of predictive policing. It uses retrospective crime data and applies it prospectively, which can help law enforcement determine the strategic deployment of their resources.

- Person-based prediction may involve regression models of risk factors or network models. In some cases, police model risk for individuals without criminal records, raising civil liberties questions.

- The rhetoric around predictive policing touts improvements in efficiency and equity as benefits. Efficiency is served by rationalizing the deployment of resources, and equity by reducing problematic biases in police practices along lines of race, class, and neighborhood.

- Predictive policing is critiqued for potentially leading to profiling and harassment under the guise of objectivity. Some of the variables used in predictive models may be proxies for race or other protected categories.

- Predictive policing differs from conventional hot spot policing in three main ways: it offers greater geographical precision, its algorithms are highly opaque, and its analytic approach is prospective rather than retrospective.

Critical Questions

- Who can meaningfully assess the algorithms that are being implemented? What kind of algorithmic oversight is appropriate?

- What structures are necessary for evaluating the efficacy of predictive policing? What should the metrics of success be for predictive policing programs?

- How do law enforcement officers treat the information they receive from each system?

- What bureaucratic dynamics influence how officers incorporate the information they receive into their policing practices?

- What procedures or level of probable cause should be required for law enforcement to take action based on the outcome of a predictive policing algorithm?

- In the context of predictive policing, do we want a higher standard of reasonable suspicion?

- To what extent do predictive policing models create self-fulfilling statistical prophecies?

- How can we measure bias in predictive models? Even with the best intentions, algorithmic decision-making can lead to discriminatory practices and outcomes.

Data&Society

The Leadership Conference

Upturn