Predictive Policing: Sweeping the Nation, Promising the Holy Grail of Policing, Preventing Crime before It Happens

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Abstract

This essay is a review of the literature on the negative impacts on predictive policing in the algorithmic era while suggesting the curbing mechanisms.it could be concluded that, apart from the environmental polytypical and social damages, predictive policing violate privacy of the individuals. It could be concluded that the present emphasis of predictive policing research is based on persuasive arguments and anecdotal evidence rather than comprehensive scientific study. Future research could be conducted of both positive and negative expectations in order to build an evidence foundation for predictive policing.

Keywords: Predictive policing, predictive algorithms, big data, literature review

Introduction

What is this story about?

Predictive policing is the use of algorithms to evaluate huge quantities of data in order to forecast and prevent probable future crimes. The most extensively used technique, place-based predictive policing, often analyzes pre-existing crime data to identify areas and periods with a high probability of crime. Some suggest that predictive policing may save police agencies money by boosting the effectiveness of crime-reduction initiatives.

This is just a glimpse of predictive policing, its issues, describing what essence of the problems, who caused them, and the curbing mechanism with opinions and suggestions. Background of Predictive policing.

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The first law enforcement agency that used predictive policing is the Santa Cruz police. In the previous years, a cumulative amount of police forces around the world have adopted predictive policing that uses statistical data to guide their decision-making. (Meijer, 2019).

High powers computers and predictive analytics are used for predicting burglaries, car thefts, property crimes, etc. Predictive policing thus raises some profound questions about the nature of prediction in an era influenced by data collection and analysis (Ferguson, 2017).

What is the problem with Predictive policing?

Against this backdrop, predictive policing has various susceptibilities in the social, environmental, and political arena. Therefore, the following questions have arisen with regard to the prior prediction of crimes. This article will scrutinize the environmental, social, and political damages of predictive policing, cases of the same, and the parties trying to resolve the problem.

Since data-driven decision systems are taking over, no organization or culture seems insusceptible from the impact of automated decision-making. Police departments are progressively positioning data mining techniques to predict, prevent and investigate crime. Therefore, predictive policing will badly impact the environment, society as well as politics.

Damages Caused by Predictive Policing on the Environment, Society, and Politics.

Predictive capacities have been implemented in various contexts and have a significant impact on applications ranging from "business, communication systems and politics to health monitoring and environmental protection" (Mader, 2013)

The major social issue in predictive policing is Racial Biasness. Algorithms are capable of racially biased criminal justice systems (Ordonelle, 2019). Predictive policing algorithms encourage directed police patrols to target minority communities with discriminatory consequences for minority individuals (Brantingham, 2018). Therefore, Predictive policing reduces the accountability of law enforcement. As most processes in data analytics are automated, it might undermine the ability of officers and departments to explain and justify their decisions in a meaningful way.

Transparency is paramount in predictive policing which is a highly challenging area in predictive policing. Police departments should tell the public which predictive policing software is used.

Environmental effects on the formation of co-offense links and accordingly our approach in defining offenders' spatial closeness is different from those in location-based social networks is caused by predictive policing because the social environments.

The political impact evident in the rise of predictive policing in Germany is above all a political phenomenon, involving the discursive shaping of domestic burglary as a security problem. These new prediction tools facilitate rhetorical links for politicians and police authorities in legitimizing their ambitions to fight crime.

Who is responsible for this problem?

USA Police departments using predictive technologies hope they will improve their departments' effectiveness and lead to this agony constructing the issues mentioned above. Apart from that, the Software companies who drag the police for Predictive policing solutions are also culprits for this issue. Therefore, different stakeholders are trying to solve the impacts of predictive policing.

Who is going to solve it?

Among several organizations, NIJ has launched a demonstration initiative to develop, test, and evaluate predictive policing in a real-world, real-time context (Pearsall, 2019). Apart from that, Researchers, policymakers, and funding organizations are trying to solve this problem at the national level.

Predictive Policing and the Influence Caused on the Society

The most advanced version of predictive policing can now offer real-time crime reports, generated by computer models, led to racial and community profiling, and an increase in unnecessary searches on law-abiding citizens (false positive). Bad data and information contribute to a debacle every step of the way. Therefore, every person needs to care about this problem.

Why should readers care about this Problem?

Predictive policing has the potential to make policing fairer. By promoting decision-making based on objective evidence, predictive policing could potentially alleviate certain discrepancies in the enforcement of the law. Therefore, this is of the utmost importance to public maintenance of the rule of law and good governance along with ethics.

How does predictive policing influence the well-being of people, society, or the environment?

Predictive policing is part of the broader development of a pre-crime society (Zedner, 2007). According to the criminologist Garland, this has led to a 'culture of control', within which criminal law is seen as an instrument to control the risk of crime (Garland, 2001)

A high level of usage of predictive policing must be treated with a high level of caution and mechanism for the public to know, assess and reject such systems.

Curbing the Issues Caused by Predictive Policing and Actions against Bad Data Predictions

How could we fix this?

Proposed solutions for curbing issues in predictive policing

- Using predictive policing for corporate sustainability

  Core issues such as data, methodology, social science, transparency, accountability, practical implementation, administration, vision, and security must be addressed before adopting any predictive policing technology. (Ferguson A.G., 2017). Transferring big data algorithms which are developed for 'predictive policing' to the field of corporate sustainability to curb major corporate scandals with disastrous environmental (BP Oil spill) or social (Rana Plaza building collapse) consequences, or global warming and floods could be prevented if big data-driven predictive algorithms were in place (Seele, 2016).

- Transparency is Paramount

  Racial biases could be prevented by having proper guidelines to enhance transparency to the public. Using randomizing software such as HunchLab over-policing areas that appear high risk because of biased crime data in order to have a balanced crime map. The appeal of predictive policing has in large measure been that it offers a "black box" solution to crime (Andrew, 2017). Therefore, the principle of transparency should be drawn by the organizations by way of regulations that could be duly enforced by the law.

- Risk assessment and monitoring mechanisms

  Assessing the "risk" associated with an individual—whether of committing future crimes or of being a suspect in past crimes—is highly contentious and fraught with personal privacy concerns (McInnis, 2013)

- Ensure fairness

  Continued empirical scrutiny along with careful policy development will be needed to guard against bias in predictive policing and ensure fairness in outcomes.

- Actions against Bad data predictions

  Some "data ethics" issues are the result of building bad products. For example, Microsoft released a chatbot named Tay. Therefore, regulations and law enforcement mechanisms are needed for bad data predictions.

Feasibility of the curbing mechanisms

Private actors' involvement complicates the hazards of predictive policing. Unscrambling expansion from execution is shielding the algorithm from public review, which amplifies concerns about noisy data, improper biases, and flawed algorithms. (Bakke, 2018). Intellectual property rights and trade secret Laws safeguard companies from the disclosure of algorithms and add a layer of secrecy to predictive policing. Private developers who do not wish to surrender information to the public can hide behind proprietary rights, which raises accountability concerns. Correctness of the models and liability of the predictive algorithms will create an accountability gap. The amalgamation of high-tech surveillance and private progress requirements increases transparency issues. Therefore, the feasibility of the curbing mechanisms seems to be challenging in the scenario.

Suggestions and Opinions about the Situation Described in the Story.

- Vendors of predictive software should disclose the source code to the public. For example, journalists should be given free access, and parts of algorithms could be open source so that software developers and crime analysts can test alternatives.

- Public forums and pressure groups are needed for lobbying purposes to analyze which criminological theories are being modeled, and their limitations. As an example, HunchLab addresses civil-rights concerns with its clients through webinars, and participates in public panel discussions alongside critics and activists. (Shapiro, 2017).

- Researchers and data journalists have to draw public attention to these types of issues and identify limitations in predictive policing. Blog posts, Facebook campaigns, and YouTube channels could be used as tools for drawing public attention to this. For example, a 2016

ProPublica investigation demonstrated that offender-based modeling algorithms were likely to misidentify low-risk black defendants as high risk and high-risk white defendants as low risk (Angwin, 2016)

- Funding organizations should fund studies of the possible inequitable effects of predictive policing — not just its accuracy. They should also publish and disseminate principles and policies on predictive policing that consider civil-rights concerns. These documents are crucial because, in the absence of legislation, a court injunction, or a consent decree, there is no federal mandate for municipal and state police oversight in the United States. As an example, last year the American Civil Liberties Union, together with 16 civil-rights, privacy, and racial-justice organizations and technology companies, published a joint statement of concern about predictive policing (see go. nature. com/2ih4sko).

- Using this as a model, reports should detail the kinds of data that can and cannot be used to train algorithms, the shortcomings of predictive systems, and their potential to amplify bias.

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