CSE5003 Assessment 2 Michael Le

PredPol is a software developed by researchers from UCLA and Santa Clara University. This technology was designed "to identify places and times with a high crime risk. “This can be achieved by "analyzing risk factors" from historical crime data, time, location, crime types, or "victimization patterns." Many developers believed that "predictive policing would eliminate human bias," saving the number of human and “police resources” for future law enforcement, saving millions of lives.

“Big Data companies” claimed that the lack of transparency and reliability was due to bias, likely due to insufficient data running for training during the incident. This can be achieved by avoiding “enforcement” and” arrest” data predictive policing purposes. In addition, police departments could not keep track of the number of “audit logs" due to low daily maintenance for the number of recent or accessible predictions. To "deploy" more "police" around specific areas or detect "individuals" who "are more likely to commit or be a victim of a crime" at any given time during the incident.

Many critics believe that the implantation of PredPol is described as “tech-washing” or a manipulative tool to give misinformation regarding "racially biased policing methods" due to the most superficial human errors. Such as replying to past historical data "derived from or influenced by corrupt, biased, and unlawful practices." This misled stakeholders, including policymakers, to make it harder to decide whether there is a “correlation between police deployment to hot spots and crime reduction” using Predictive Policing. "In 2014, a survey of 200 departments found that 38%" in the USA alone that PredPol find the technology reliable. However, "70% stated they planned to implement the technology" in the next 25 years to detect any future criminal activity in the specific region or suburb.

The ethical implications of PredPol are mainly due to the increased enhancement of “AI” applied in many police departments and other workforces. They were heavily involved in a massive volume of "data," hoping to reduce any “potential risks” or misuse “of surveillance and invasion” or violation without any permission. Ensuring that PredPol predictive models are treated reasonably and kindly under any circumstance in which criminal activity occurs. Although many false interpretations and accusations involved using PredPol were heavily reliant on past historical arrests, especially "from marginalized or minority groups in predictive models," without overlooking other demographics in certain hotspots, the criminal activity was likely to occur at the time. This can lead to potential bias and controversy, as the technology was poorly used in practice and execution, eliminating or improving any data that can reduce bias. This would have been achieved if the policies or laws were adequately enforced or improved to protect all communities affected by PredPol’s predictive models or surveillance. We must consider and address any “feedback” and “concerns about fairness and equity” from the public and stakeholders. To further enhance potential biases in algorithmic decision-making to improve a fair criminal and legal system for all marginalized communities.

Thanks to the increased demand for “AI technologies” such as Facial Recognition, Predictive Policing, Natural language processing, Cybercrime detection, and Automated Surveillance. To reduce the number of "human officers," "AI systems lack subjective judgment and reasoning capabilities," raising ethical concerns about stakeholders' decision-making. This can be improved to transparency to ensure that predictive modeling improves many factors, such as data modeling, collection, and exploration, to achieve better results. To account for their "performance of AI systems" by splitting and improving the training and validation data to generate better models and ensuring the development of "clear frameworks for assigning responsibility and accountability." To eliminate bias by continuously monitoring recent “resources” and frequently updating documentation.

Furthermore, it is to "engage’ and build “trust” “with the public” and “stakeholders” to spread awareness to all different demographics and communities within the region. To keep up their accountability and transparency using PredPol are up to date under “ethical and legal standards” accounted for every individual action during the time of crime has occurred. A "2016 study" in "Pennsylvania shows that the use of PredPol shows “no evidence that it jeopardized” the balance between public safety and promoting civil policing. It is assumed that the technology has improved and can "correctly identify" victims, "high-risk individuals," or criminal suspects. Focusing less on low-risk individuals is not accountable during the time of the incident. We are leaving predictive policing algorithms to become more robust and reliable, avoiding disparity from common communities. Furthermore, we must consider other communities and demographics to reduce bias and treat law enforcement fairly.

Thus, able to improve public safety and reduce crime at certain hotspots, the crime is highly likely to happen. The MIT Technology Review article publicized the disproportionately that the algorithms were trained on "white populations outside of the US" that was "hard to maintain across different US jurisdictions." Further evidence after deploying PredPol using AI technologies detected that "3% of the population is Black with 12% in the US alone", whereas in “Europe measured” only “2% of the population is Black”. There are "massive differences in social, economic conditions between countries and populations," deemed less accurate in places where technology was improperly executed. Requires a “less” hostile approach that will cost hundreds of thousands of dollars (in USD) to save many communities affected by predictive policing.

In PredPol's implementation of law enforcement, we must analyze the ethical frameworks of consequentialism and virtue ethics. With further investigation of the PredPol's technology, its goal was to maximize and predict likely hotspots of any criminal activity in that region. We must account for essential factors that can help achieve this based on historical data and continuous monitoring from a Police perspective. Sequentially, we break down any interferences that may disrupt any disproportionalities from specific communities, reducing any bias that will require millions of dollars on surveillance. To ensure that once the PredPol technology is impaired after running several trials with the training data, track down other patterns and accuracy results from different areas and possibly the world. We can guarantee that it will be reliable for all policing departments to detect any more future crimes. To optimize the reduction of criminals or victims frequently appearing in these hotspots sooner. Regardless of the proportionalities, more criminal activities are happening frequently at certain hotspots in any region. If necessary, take legal action to protect all victims from criminals and suspects. That should be carefully proposed and treated kindly and fairly under PredPol implementation in law enforcement practices.

Different approaches or modifications can enable Predictive Policing to address bias, transparency, and accountability issues. One approach to this method is to reduce the number of targeted innocent individuals who happened to occur at the hotspot or criminal activity regardless of their ethnicity, reducing racial bias. We should account that they should not be counted as victims or suspects under “law enforcement” at the time of the incident. Despite this, we must be thoughtful about AI applications and whether PredPol can detect criminal information by relying on "past" historical data to predict "future behavior." However, it fails to comply with individuals who have "already paid their debt." It only applies to criminals or suspects who have finished their finite prison sentences, probation periods, and fines they have paid off. Failing these measures or factors can lead to false accusations. By having police officers frequently catch wrong suspects due to human errors or technological abuse of PredPol’s Predictive Policing. This would significantly increase human bias if data has not been appropriately trained. This violates ethical concerns such as discrimination, harassment, unethical accounting, favoritism, and nepotism. Ways to reduce bias and improve transparency and accountability is to apply other AI technologies and applications. For instance, they use RITCS (Real-time intelligence cameras) or SSL, which uses "social network analysis and machine learning." That was used in “advanced military software and technologies” can used as a substitute for PredPol to improve their Predictive Policing methods.

In conclusion, in response to the ethical concerns surrounding PredPol, it is described as a manipulative tool for "sheer science." Enables the creation of opportunities to promote “public safety and security." To address these challenges concerning policing through law enforcement, criteria should "be met" to optimize AI further. "Requires a balanced and responsible approach that prioritizes human values, community engagement, and ethical considerations." Facing ideal problems due to a shortage of “budgets” and “distrust," raising ethical concerns about whether PredPol should be reliable as a main AI framework in future policing. Rather than replacing or delaying the technology to good use after trial and error, it requires much patience in the hope of resolving all issues related to the criminal justice system and society and helping to create and improve a "more just and more equitable" for all communities and humanity at stake.

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