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Removing Racially Biased Algorithms in Policing

Andie Lee
Purdue University, lee3324@purdue.edu

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**Undergraduate Student, Department of Political Science**

Purdue University

INTRODUCTION

Local police departments use algorithm-based programs to do police work and predict crime. Technology has created the police tactic of predictive crime prevention. Police work, however, requires social skills, assessment of the environment, and most importantly human interaction. Automated policing lacks these characteristics. Moreover, the algorithms used to make crime predictions and risk assessments have disproportionately affected minorities. Big data, such as crime location and date or personal history of the accused, are used to validate the findings of these automated systems. Companies such as Predpol and Equivalent recognize the importance of removing racial bias from their algorithms; it is deliberately stated on their websites. Nevertheless, racial bias remains an issue, and society should not ignore it. The racial bias embedded in these algorithms subjects minorities to targeted policing and inaccurate evaluations. Until the algorithms are less biased, police departments should not use them.

Algorithms at Work

Several private companies have developed algorithms for police departments to use. Automated policing uses data to formulate distinctions and predictions regarding crime frequency and location. One example is Predpol. It's a machine learning algorithm that predicts where crime will occur. The company claims that it only uses three data points to determine if an area is high risk. These are crime type, crime location, and crime date and time. Predpol heavily emphasizes that they do not use demographic or ethnic information to make their predictions. High-risk areas are shown on a map as a red box. The red box alerts police that the highlighted area will have the most criminal activity. Police departments in several
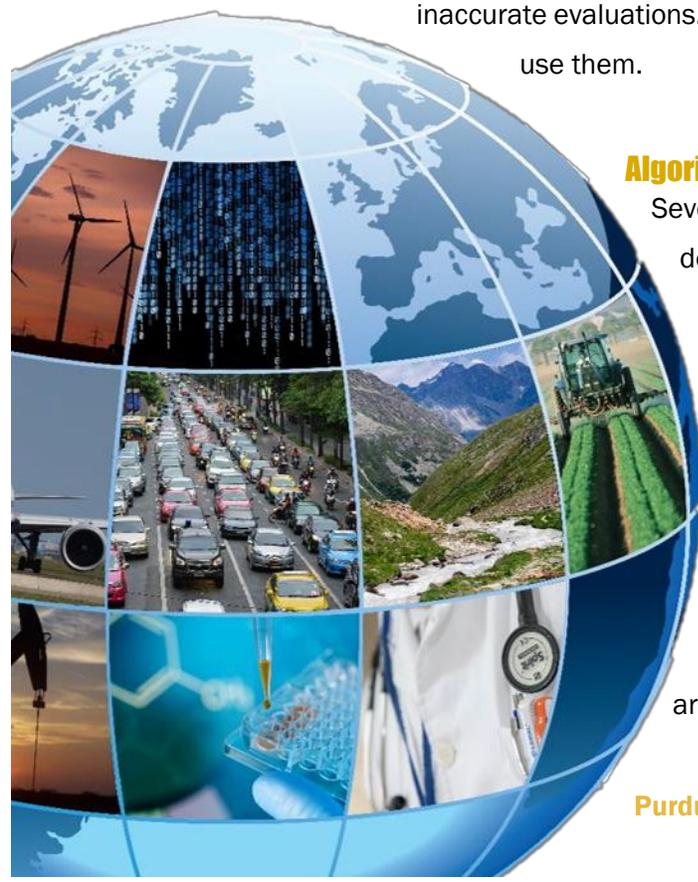
U.S. states have used Predpol. Predpol dictates where these local police departments patrol.

Automated policing also uses data to make assessments for recidivism, sentencing, and rehabilitation for prisoners. An example of this type of algorithm is the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS). The original purpose of COMPAS was to help combat increasing prison populations by imprisoning offenders based on their risk level. COMPAS is an algorithm that is used to predict the likelihood of an offender's recidivism. This risk-assessment tool assigns offenders a score indicating their risk level based on an offender's personal history. The data from COMPAS are used inappropriately by criminal justice system actors to determine offenders' sentences, how they are guarded in prison, and their rehabilitation plan after they are released.

Impacts on Street Policing and Community Relations

Police departments in various parts of the United States rely on an algorithm, such as Predpol, to determine crime hotspots. The police target the red box locations because, according to the algorithm, crime is occurring the most there. If police efforts are concentrated in red box areas, a feedback loop is created. Police go to red box spots, arrest people for criminal activity, report the crimes from that location for more data collection, and then the algorithm further emphasizes that red box area as crime prone. There is embedded racial bias in the algorithm due to the disproportionate amount of criminal data coming from certain neighborhoods more than others. This is due to the makeup of the populations in these red box locations. The red box areas are in minority neighborhoods because in the past minorities were

criminalized due to the color of their skin. History plays a major role in why certain cities or neighborhoods are identified as more prone to criminal activities. The relationship between law enforcement and minorities has been complicated and rocky. This type of algorithm is set to make the situation worse. Using crime data to determine hotspots perpetuates the ostracization of poor minorities. Minority neighborhoods already feel targeted by law enforcement. Now there is an algorithm that perpetuates unequal treatment of people and further focuses police attention on minority communities.

Impacts of Risk Assessment

Risk-assessment algorithms provide conclusions that disproportionately affect minorities when it comes to criminal behavior and punishment. Minorities, specifically black males, are suffering the most from the risk-assessment algorithms. These assessment algorithms produce deeply problematic and faulty results. There have been instances where COMPAS assesses a black defendant as high risk who commits a non-violent offense for the first time, whereas the algorithm gives a white defendant who has a lengthy criminal record of armed robbery, assault, and DUIs a low score. This makes our community unsafe as white high-risk defendants are returned to the streets and commit more crime. Yet the data regarding their criminal history would have predicted this behavior, and the algorithm should have given them a high-risk assessment. The discrepancy can only be attributed to the racial bias in the algorithm. This is a major issue because black defendants are perceived as their statistical score and are judged heavily on that score. Individuals who receive inaccurate assessments are punished due to a racial bias embedded in algorithms. It is unethical to decide a prison sentence for someone based on a recidivism risk score, especially when

minorities are incorrectly assessed. People cannot have faith in systems that allow dangerous people to walk away with lesser sentences and punish others on the basis of their race.

Policy Recommendations

There needs to be immediate action to remove the role of algorithms completely. Algorithm-based policing will cause more unequal targeting and assessments for minorities. Police departments should not determine where they are going to patrol based solely on three data points. The algorithm runs a cycle that repeatedly places red boxes in minority neighborhoods. If police departments want to continue to use systems like Predpol, they need to take additional data into consideration. The algorithms will not be useful to combat crime until the algorithms consciously consider how racial biases affect the outcomes they produce.

In addition, there should be no use of the risk-assessment algorithm in the criminal justice system. If the technology does not give accurate assessments, it should never be used to determine sentencing or impact rehabilitation requirements after prison. Systems that punish minorities will only further tensions, and there will be no progress towards better policing. It should be noted that some of these companies promote that they do not use any racial or individualistic data in their algorithms. This suggests the companies understand that race should not be a factor in risk assessment. Unfortunately, that is exactly what is happening with these policing algorithms. As long as black defendants and minority communities are unfairly targeted and white defendants receive the benefit of the doubt due to their skin color, these algorithms have no place in policing.