Artificial Intelligence and Mass Incarceration

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Introduction

This work aims to integrate perspectives.

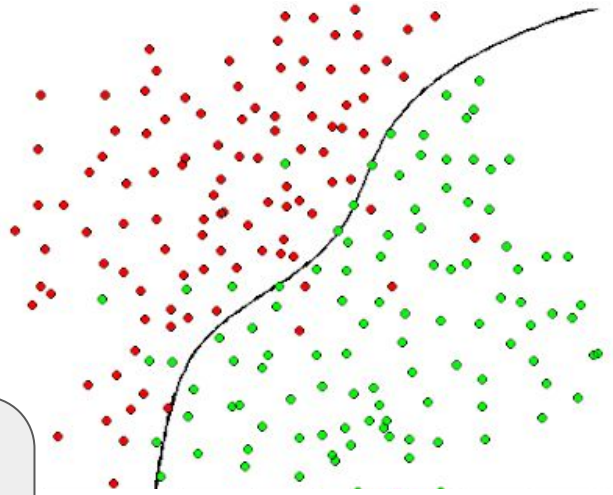
The AI Incarceration Pipeline

- ★ Predictive policing and surveillance ➜ arrests
- ★ Risk assessment algorithms ➜ bail, sentencing, and parole
- ★ Machine testimony ➜ evidence and convictions

Arguments

- ★ Bias in data is the tip of the iceberg
  - implementation environment
  - correctness metrics and objectives
- ★ Black-box algorithms violate rights
  - public’s right to access criminal proceedings
  - defendant’s right to face evidence
- ★ Solutions must be interdisciplinary

Machine Learning



Learning Phase

Input (training) Data set

<u>Learning Algorithm:</u> classifies data into outcomes
<u>Supervised:</u> human-generated predictors, classifiers
<u>Unsupervised:</u> machine-generated predictors, classifiers

Model for Prediction-making

Prediction Phase

New data

Model for Prediction-making

Algorithm's Prediction

Image Credit: http://openclassroom.stanford.edu/MainFolder/DocumentPage.php?course=MachineLearning&doc=exercises/ex8/ex8.html

Predictive Policing

- ★ Chicago's heat list (Saunders et al., 2016)
  - did not impact gun violence: algorithm identified 0.74% of homicide victims
  - individuals on list had 39% more interactions with police
  - individuals on list 2.88 times more likely to be arrested for a shooting
  - CPD admitted to using the list to come up with suspects for unsolved shootings
- ★ Oakland experiment (Lum & Isaac, 2016)
  - drug use is evenly spread; low-income communities of color have 200x more arrests
  - positive feedback loop in popular predictive policing technology PredPol
  - PredPol claims to "eliminate…profiling concerns" (2020)
- ★ Predictive policing algorithms facilitate bad practices
- ★ China's Integrated Joint Operations Platform (IJOP)
  - cameras with facial recognition, WiFi sniffers, license plate numbers, finances, etc.
  - round-up list for law enforcement visits, detainment, and political re-education

Predictive Policing → Restorative Justice

★ Police contact is associated with negative mental and physical health consequences (Sewell & Jefferson, 2016)

★ Algorithms have the potential to reveal bias, help allocate resources to repair the harm of dehumanizing police practices

Risk Assessment

- ★ Virginia Pretrial Risk Assessment study (Danner et al., 2016)
  - race was not used to determine risk
  - there was a statistically significant difference in the algorithm's predictive ability based on race, "with the model performing better for Whites"
  - risk factors were "weighted, summed, and collapsed" to fix the problem
- ★ Risk assessment is unregulated and inconsistent (Goel et al., 2018)
- ★ Removing bias from data (Johndrow & Lum, 2017)
  - identify variables that "encode" for race; transform data to remove dependencies
  - algorithm treats all races "as though they are the same with respect to recidivism"
  - correctness metric is still the likelihood that the defendant will be re-arrested
  - "accurate" risk assessment is a reflection of the system, not the defendant
- ★ Rethinking risk ➔ addressing predictors of recidivism

Machine Testimony

- ★ Massive DNA databases offer probabilistic matches
- ★ Crime lab analysis is “slapdash” (DiFonzo, 2005)
  - messy samples and collections
  - fake test results (Mettler, 2017), compensation for conviction (Shaer, 2016)
  - misrepresentation of statistical evidence
- ★ Black-box machine testimony (Kaufman et al., 2017)
  - violates the public’s right to “petition the government for a redress of grievances” (U.S. Const. amend. I)
  - violates the defendant’s right to be “confronted with the witnesses against him” (U.S. Const. amend. VI)

Recommendations

- ★ **Use machine learning as a tool to understand systemic bias**
- ★ Shift the focus of implementation of machine learning from punitive to restorative practices
- ★ Law enforcement, crime labs, and courtrooms should create positions for people who understand machine learning
- ★ Machine learning and data science researchers and developers should take responsibility for the impact of their creations
- ★ Government should regulate the use of artificial intelligence in the criminal justice setting

RACISM LEADS TO FASCISM

Feds Used a Military Surveillance Predator Drone to Spy on Minneapolis BLM Protestors

Published on May 30, 2020 at 10:00 AM ET
By **Daniel Villarreal**

Police have been spying on black reporters and activists for years. I know because I'm one of them.

I learned during a police surveillance trial that the Memphis Police Department spied on me and three other journalists.

By **WENDI C. THOMAS** June 10, 2020, 8 a.m.

FBI TRACKED AN ACTIVIST INVOLVED WITH BLACK LIVES MATTER AS THEY TRAVELED ACROSS THE U.S., DOCUMENTS SHOW

George Joseph, Murtaza Hussain
March 19 2018, 11:29 a.m.

Image Credits:
http://theweeklychallenger.com/black-surveillance-matters/
https://specials-images.forbesimg.com/imageserve/5e20d1a0a854780006e8b36a/1920x0.jpg?cropX1=0&cropX2=3000&cropY1=223&cropY2=1565
https://stmedia.stimg.co/ows_144002532180502.jpg?fit=crop&crop=faces

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