

Unlocking the Black Box

Megan Graham
Clinical Supervising Attorney
Samuelson Law, Technology & Public Policy Clinic

February 2021

Berkeley Law

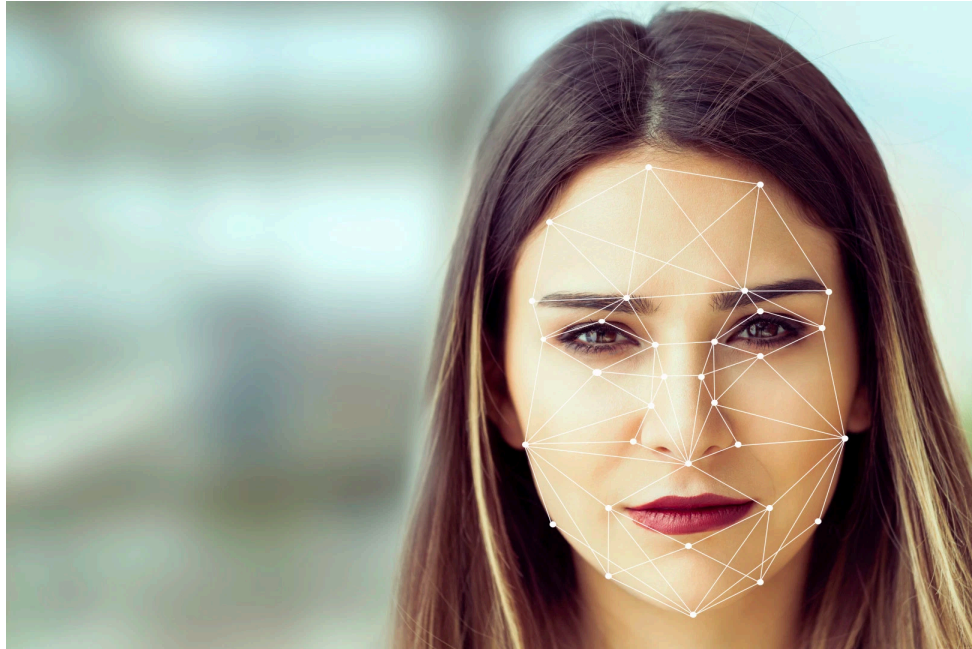
Where You See Black Box Algorithms

Crafting Challenges

Where You See Black Box Algorithms

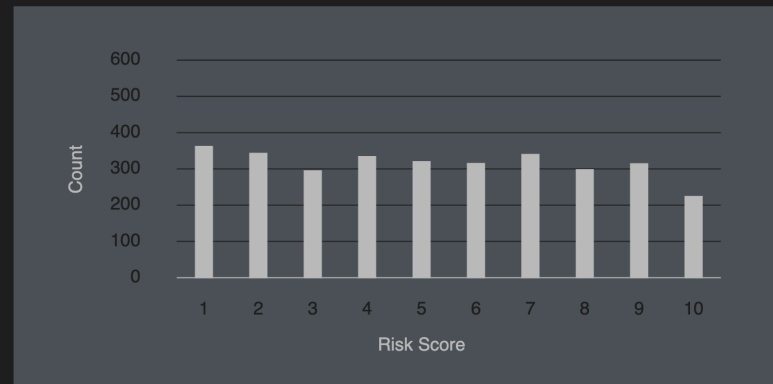
Crafting Challenges

Facial Recognition

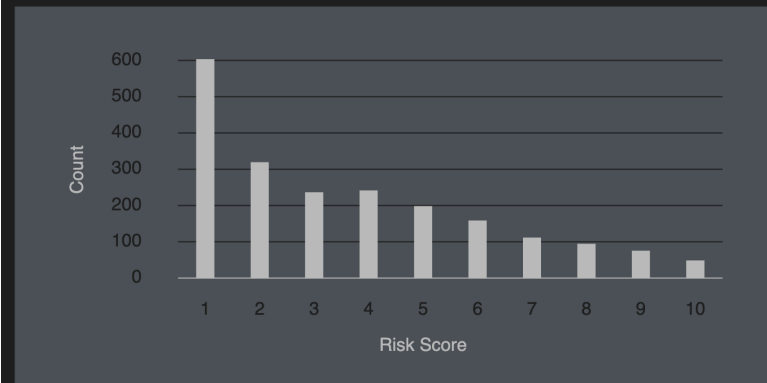


Risk Assessment Scores

Black Defendants' Risk Scores



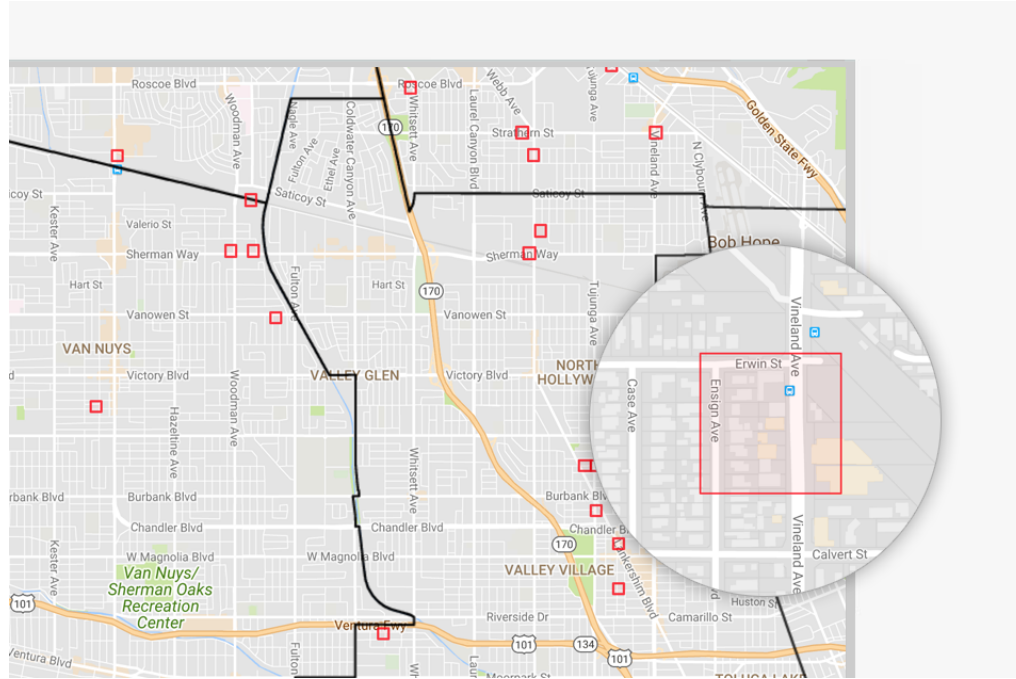
White Defendants' Risk Scores



These charts show that scores for white defendants were skewed toward lower-risk categories. Scores for black defendants were not. (Source: ProPublica analysis of data from Broward County, Fla.)

Source: Julia Angwin et al., *Machine Bias*, ProPublica (May 23, 2016),
<https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>

Predictive Policing Algorithms



Probabilistic Genotyping



Where You See Black Box Algorithms

Crafting Challenges

Challenges Can Take Many Forms

- Discovery request + related motion to compel
- Pre-trial motion to exclude evidence
- *Daubert/Frye* motion
- Requests for jury instructions & adverse inferences
- Challenges via objections or experts during trial

Discovery Requests & Motions to Compel



Motions to Exclude Evidence



Daubert, Frye, and Rules of Evidence

- *Daubert*

- Scientific theory can be and has been tested
- Has been subjected to peer review and publication
- Known or potential error rate
- Generally accepted in the relevant scientific community [the *Frye* standard]
- Standards that control operation + were they used

- FRE 702

- (a) specialized knowledge will help trier of fact understand the evidence or determine a fact in issue
- (b) testimony is based on sufficient facts or data
- (c) testimony is product of reliable principles/methods
- (d) principles/methods were reliably applied in the case

Other Types of Challenges



How to Tackle These Issues in Your Cases

- Experts
- The Law (at least kind of)
- Foundational **AND** as applied challenges
- Build a record
- Don't forget the non-tech arguments!