The World of Mathematics and Statistics

Guest Lecture and Q&A

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Fairness, Accountability, and Transparency:
(Counter)-Examples from Predictive Models in Criminal Justice

As statistical and machine learning models increasingly operate behind the scenes to influence and shape our experiences, decisions, and societies, recent attention has focused on ensuring that these models embody the values of fairness, accountability, and transparency. One area where these values are particularly important is criminal justice, as statistical and machine learning models are used to make or inform highly consequential decisions— those concerning an individual's freedom— throughout the criminal justice system. Through examples from my work on predictive policing and recidivism prediction, spanning a variety of approaches to model evaluation, I will highlight how predictive models in criminal justice can fail to live up to the ideals of fairness, accountability, and transparency. In particular, I will discuss how predictive policing has the potential to reinforce and amplify unfair policing practices of the past and perpetuate racial disparities in policing. I will also discuss how a recidivism prediction model's failure to ensure adequate accountability for model inputs opens the door to gaming, and how lack of transparency into the model development process can obscure and provide cover for politically-driven policy decisions. For each example, I'll briefly discuss both "technical" and "non-technical" strategies to mitigate the identified problems.

credit to the President's Fund for Racial Justice

Wednesday, January 13, 2021
Lecture: 2:15-3:00pm (EST)
Q&A: 3:00-3:15pm (EST)
Coffee hour: 3:15-4:15pm (EST)
Zoom link: https://swarthmore.zoom.us/j/87449193048