Title: Discrimination, diversity, and information in college admissions policies

Abstract: Reducing disparities and improving diversity and access is a topic of growing importance in decision-making settings. Motivated by documented disparities in college admissions and recent policy debates in higher education, we introduce a theoretical framework to study how a decision-maker, concerned with both merit and diversity, selects candidates under imperfect information, limited capacity, and possibly legal constraints. We apply this framework to capture how disparities both across and within social groups can arise even in the absence of prejudice and study the tradeoffs of admissions policies used in practice to address these disparities (dropping standardized testing, top percent rule). Moreover, we take an optimization-based approach and incorporate fairness metrics to a generalized optimization objective with legal constraints. We find that the optimal selection policy takes the form of a middle-tier lottery.