Friday, September 14 11 a.m.–12 p.m. 1400 Wegmans Hall

Inherent Trade-Offs-in Algorithmic Fairness

With Jon Kleinberg Cornell University



JON KLEINBERG is the Tisch University Professor in the Departments of Computer Science and Information Science at Cornell University. His research focuses on issues at the interface of algorithms, networks, and information, with an emphasis on the social and information networks that underpin the web and other online media. He is the recipient of research fellowships from the MacArthur, Packard, Simons, and Sloan Foundations, as well as awards including the Harvey Prize, the Nevanlinna Prize, the SIGKDD Innovation Award, and the ACM Prize in Computing.

Recent discussion in the public sphere about classification by algorithms has involved tension between competing notions of what it means for such a classification to be fair to different groups. We consider several of the key fairness conditions that lie at the heart of these debates and discuss recent research establishing inherent trade-offs between these conditions. We also consider a variety of methods for promoting fairness and related notions for classification and selection problems that involve sets rather than just individuals. This talk is based on joint work with Sendhil Mullainathan, Manish Raghavan, and Maithra Raghu.

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