Allocating Scarce Societal Resources Based on Predictions of Outcomes

Demand for resources that are collectively controlled or regulated by society, like social services or organs for transplantation, typically far outstrips supply. How should these scarce resources be allocated? In this talk, Dr. Das will discuss his work on weighted matching and assignment in two domains, namely living donor kidney transplantation and provision of services to homeless households. His focus will be on how effective prediction of the outcomes of matches has the potential to dramatically improve social welfare both by allowing for richer mechanisms and by improving allocations. He will also discuss implications for equity and justice.

November 13th, 3:30-4:30 p.m., SAL 101

This lecture satisfies requirements for CSCI 591: Research Colloquium.

Dr. Sanmay Das is an associate professor in Computer Science and Engineering and the chair of the steering committee of the newly formed Division of Computational and Data Sciences at Washington University in St. Louis. He is vice-chair of the ACM Special Interest Group on Artificial Intelligence and a member of the board of directors of the International Foundation for Autonomous Agents and Multiagent Systems. Dr. Das has served as program co-chair of the AAMAS and AMMA conferences, and has been recognized with awards for research and teaching, including an NSF CAREER Award and the Department Chair Award for Outstanding Teaching at Washington University.