Mechanism Design for Constrained Matching

**ABSTRACT**

The theory of two-sided matching (e.g., assigning residents to hospitals, students to schools) has been extensively developed, and it has been applied to design clearinghouse mechanisms in various markets in practice. As the theory has been applied to increasingly diverse types of environments, however, researchers and practitioners have encountered various forms of distributional constraints. As these features have been precluded from consideration until recently, they pose new challenges for market designers. One example of such distributional constraints is a minimum quota, e.g., school districts may need at least a certain number of students in each school in order for the school to operate. In this talk, I present an overview of research on designing mechanisms that work under distributional constraints.

**BIOGRAPHY**

Prof Makoto Yokoo received the B.E., M.E., and Ph.D. degrees in 1984, 1986, and 1995, respectively, from the University of Tokyo, Japan. He is currently a Distinguished Professor of Information Science and Electrical Engineering, Kyushu University, Japan. He served as a general co-chair of International Conference on Autonomous Agents and Multi-Agent Systems in 2007 (AAMAS-2007), and as a program co-chair of AAMAS-2003. He is the past president of International Foundation for Autonomous Agent and Multiagent Systems (IFAAMAS), which is a hosting organization of AAMAS conference series. He is a fellow of the Association for Advancement of Artificial Intelligence (AAAI). He received the ACM SIGART Autonomous Agents Research Award in 2004, and the IFAAMAS influential paper award in 2010.

All are welcome!

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