TAKAYUKI ITO LABORATORY

Seminar

A Combinatorial Prediction Market for the US Elections

We present a new market maker that automatically provides liquidity across multiple logically interrelated securities. Our approach lies somewhere between the industry standard treating related securities as independent and thus not transmitting any information from one security to another--and a full combinatorial market maker for which pricing is computationally intractable. Our market maker, based on convex optimization and constraint generation, is tractable like independent securities yet propagates some information among related securities like a combinatorial market maker, resulting in more complete information aggregation. We prove several favorable properties of our scheme and report on its information aggregation performance in a live implementation of the market for the 2012 US presidential elections, which drew hundreds of users.

日　程　2014 年 12 月 9 日（火）
13:00〜15:00

会　場　名古屋工業大学
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Sébastien Lahaie is a senior researcher at Microsoft Research in New York City. He received his PhD in Computer Science from Harvard in 2007 and was previously a senior research scientist at Yahoo. His research focuses on computational aspects of marketplace design, including sponsored search and display advertising. He is interested in designing market algorithms that scale well and properly anticipate user behavior. Other interests include preference modeling and elicitation, sponsored search, and prediction markets. He serves as a co-editor for Economic Inquiry and was previously a program chair for AMMA. He regularly serves on the program committee of conferences such as EC, IJCAI, WWW, and AAMAS.