

Editor's Introduction

I am very happy to introduce Issue 7.2 of SIGecom Exchanges. This is the second issue of the Exchanges since its makeover. The makeover changed the focus from full-length articles to letters, in which authors can give a quick overview of recent research, review a recent conference or book, or lay out their opinions on where research is or should be heading. Full-length articles continue to be welcome, though.

Issue 7.1 was a special issue dedicated to combinatorial auctions; in contrast, Issue 7.2 does not have a specific topic, resulting in a greater variety of topics related to e-commerce. Nevertheless, auctions continue to be well represented.

The first contribution in this issue is an announcement of the book “Autonomous Bidding Agents: Strategies and Lessons from the Trading Agent Competition” by Wellman, Greenwald, and Stone. The book tells the story of the development and evolution of the Trading Agent Competition(s), gives detailed analyses of specific TAC techniques, and develops some general foundations for trading agent design.

The next four letters concern incentive compatibility (also known as truthfulness or strategy-proofness). In “Truthful Opinions from the Crowds,” Jurca and Faltings review their work on incentivizing users to give truthful feedback—for example, by comparing their reports to a reference report and paying them accordingly. In “Implementable Allocation Rules,” Monderer considers in which domains (weak) monotonicity of an allocation rule is sufficient for it to be (truthfully) implementable, improving on an earlier result by Saks and Yu. The letter “Characterizing Truthfulness in Discrete Domains” by Mu’alem and Schapira studies a similar topic, namely implementability in discrete domains (such as integer grid domains). Finally, in “Towards a Theory of Incentives in Machine Learning,” Procaccia explores a machine learning setting in which the labels of points in the input space are reported by different agents, and these agents must be incentivized to report them truthfully.

The following three contributions concern issues in auctions (other than incentive compatibility). In their long contribution “Online Auctions and Generalized Secretary Problems,” Babaioff, Immorlica, Kempe, and Kleinberg study auction settings where bidders arrive over time, and decisions on their bids must be made before other bidders arrive; they show how such settings can be seen as generalized versions of the well-known secretary problem, and they derive a number of results in this framework. In “A Modular Framework for Iterative Combinatorial Auctions,” Lahaie and Parkes develop a framework in which an iterative combinatorial auction is seen as a way to perform coordinated learning of the bidders’ valuations, with the goal of identifying an efficient allocation. Finally, Mous, Robu, and La Poutré discuss how the exposure problem that a bidder with complementary valuations faces in sequential auctions could be addressed using priced options, in “Can Priced Options Solve the Exposure Problem in Sequential Auctions?”

The next letter, “Bayesian Stackelberg Games and Their Application for Security at Los Angeles International Airport,” by Jain, Pita, Tambe, Ordonez, Paruchuri, and Kraus, discusses the authors’ application of game theory in the real world: namely, solving Bayesian Stackelberg games to schedule security checkpoints and canine patrols at Los Angeles International Airport.

The final two contributions concern electronic commerce applications. In “Procurement Plat-

forms for Consumers,” Klafft discusses the risks and benefits of e-procurement platforms for consumers, based on results from empirical studies and focus group interviews. In “Enabling Internet Singularity within the Electronic Commerce Trust Model,” Mahmood and Selvakennedy propose an application architecture for linking content and people together, with a focus on trust evaluation information.

The issue concludes with a new Editor’s Puzzle, in which three firms are contemplating which of several related products to release; it is your job to figure out which ones will be released. The most elegant solution will be published in the next issue. (Also, the previous issue’s puzzle on combinatorial auction winner determination was solved by each of Daniel Lehmann, Peter Stone, and Mukund Sundararajan, who submitted very similar solutions, but they did not consider their solutions elegant enough to publish. If someone submits a more elegant solution to that puzzle, I will be happy to publish it in the next issue. Hint: think about prices and duality, though integrality plays a role...)

I would like to thank the reviewers for this issue, as well as our Information Director Daniel Reeves who has once again been very helpful in putting this issue together.

Enjoy!

Vincent Conitzer
Editor-in-Chief