Editors’ Introduction

INBAL TALGAM-COHEN
Technion - Israel Institute of Technology
and
S. MATTHEW WEINBERG
Princeton University

This issue of SIGecom Exchanges brings to our readers a letter from the SIGecom executive committee, the job candidate profiles for 2022, two surveys, and three research letters.

The 2022 SIGecom Job Candidates Profiles are compiled by Jason Hartline and Vasilis Gkatzelis. This is the seventh year of this welcome annual tradition, and we thank Jason and Vasilis for their continuing contribution to the growth of our community. For the second time we also have a section dedicated to market design candidates – an initiative originally of Assaf Romm, joined this year also by Yannai Gonczarowski and Ran Shorrer.

Simina Brânzei authored a fascinating survey on exchange markets, a basic model of an economy where agents bring resources to the market and exchange them for other goods. She surveys recent results on proportional response dynamics in such markets, which recently appeared in EC and Neurips. Warut Suksompong authored an excellent survey on constraints in fair division. While the majority of the literature assumes that all allocations are feasible, in practice many kinds of constraints arise – connectivity, cardinality, matroid or geometric, to name a few. Both surveys outline a number of open questions and directions.

A letter from Krishna Dasaratha and Kevin He describes recent results from two works of theirs, one appearing in Theoretical Economics and one winning the Best Paper award at EC’21. These results paint a picture of how network structure influences social learning outcomes. Sherry He, Brett Hollenbeck and Davide Proserpio present their empirical findings on fake product reviews on major retail websites. They find that a wide array of products purchase fake reviews – even products with many reviews and high average ratings. Their EC’21 paper on the market for fake reviews received the Exemplary Empirics Track Paper award. Aviad Rubinstein and Junyao Zhao describe their recent results on designing simple, incentive compatible and revenue-optimal auction protocols with expected communication complexity that is infinitely more efficient than their deterministic counterparts. These results appeared in STOC’21.

We hope you enjoy this issue, portraying some of our community’s best cutting-edge research. Please continue to volunteer letters, surveys, and position papers. As usual, thanks to Yannai Gonczarowski for his help in putting the issue together!

Author’s address: italgam@cs.technion.ac.il; smweinberg@princeton.edu