

Strategic Human-Agent Interaction: From Promoting Traffic Safety to Search and Rescue

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ABSTRACT

As technology progresses, we find ourselves working with automated agents increasingly more often. Developing intelligent automated agents capable of interacting proficiently with people necessitates the development of integrative approaches which consider both the computational and human factors. In this talk, I will present three of my integrated research efforts towards developing intelligent agents with real-world impact, ranging from ‘adversarial’ settings such as apprehending reckless drivers to fully cooperative settings such as robotic search and rescue. Through extensive empirical evaluations, we demonstrate how the integration of AI and agent technologies (including machine learning and optimization) with behavioural sciences such as psychology and economics can bring about a much desired leap in the way we develop human interacting agents for social good.

KEYWORDS

social agents; human-computer interaction; behavioural science

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Short Bio

Ariel Rosenfeld is a Koshland Postdoctoral Fellow at the Computer Science & Applied Mathematics Department, Weizmann Institute of Science, Israel. He obtained a PhD in Computer Science from Bar-Ilan University following a BSc in Computer Science and Economics, graduated ‘magna cum laude’, from Tel-Aviv University, Israel. Rosenfeld’s research focus is Human-Agent Interaction and he has published on the topic at top venues such as AAMAS, IJCAI, AAAI and ECAI. Rosenfeld has a rich lecturing background which spans over a decade and has recently been awarded the ‘Best Lecturer award for outstanding teaching by Bar-Ilan University, Israel.

