

THE DEPARTMENT OF COMPUTER SCIENCE PRESENTS

INVITED SPEAKER SERIES

Sarit Kraus Bar-Ilan University

15 November 2022 at 9am

Zoom Link: https://binghamton.zoom.us/j/99767833042

Intelligent Agents That Learn to Collaborate with People

Abstract:

Automated agents that collaborate with people can be useful in supporting or replacing people in complex tasks. The inclusion of people presents novel problems for the design of automated agents' strategies. People do not necessarily adhere to the optimal, monolithic strategies that can be derived analytically. Their behavior is affected by a multitude of social and psychological factors. In this talk I will show how combining machine learning techniques for human modeling, human behavioral models, formal decision-making and game theory approaches enables agents to collaborate well with people. Applications include intelligent agents that help drivers in autonomous cars, agents that support human operators providing online service to customers, and teams of humans and drones.

Bio:

www.cs.biu.ac.il/~sarit

Sarit Kraus (Ph.D. Computer Science, Hebrew University, 1989) is a Professor of Computer Science at Bar-Ilan University. Her research is focused on intelligent agents and multi-agent systems integrating machine-learning techniques with optimization and game theory methods. For her work she received many prestigious awards. She was awarded the IJCAI Computers and Thought Award, the ACM SIGART Agents Research award, the ACM Athena Lecturer, the EMET prize and was twice the winner of the IFAAMAS influential paper award. She is an ACM, AAAI and EurAI fellow and a recipient of the advanced ERC grant. She also received a special commendation from the city of Los Angeles. She is an elected member of the Israel Academy of Sciences and Humanities.