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*The Seeing-eye Robot Grand Challenge: Developing a  
Human-Aware Artificial Collaborator*

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**Abstract:** In this talk I will present the seeing-eye robot grand challenge and discuss the components required to design and build a service robot that can replace or surpass the functionalities of a seeing-eye dog. This challenge encompasses a variety of research problems that can benefit from human-inspired AI: reasoning about other agents, human-robot interactions, explainability, teaching teammates, and more. For each of these problems, I will present an example novel contribution that leverages the bilateral investigation of human and artificial intelligence. Finally, I will discuss the many remaining challenges towards achieving a seeing-eye robot and how I plan to tackle these challenges.

Bio: Reuth Mirsky is a Postdoctoral Fellow at the Computer Science Department in the University of Texas at Austin. She received her Ph.D. on plan recognition in real world environments from the Department of Software and Information Systems Engineering in Ben Gurion University. She is interested in the similarities and the differences between AI and natural intelligence, and how these can be used to extend AI. In her research, she seeks algorithms, behaviors and frameworks that can improve existing AI with human-inspired design. Beyond her research, Reuth is an active member in the AI research community. Some of her recent roles are: a chair for the Plan, Activity, and Intent Recognition (PAIR) workshop as part of the AAAI workshop series, a guest editor in *Frontiers of Artificial Intelligence* in a special issue on Plan and Goal Recognition, a program committee member for AAMAS 2021, and a reviewer for AIJ, JAIR, and RA-L. Reuth was selected as one of the 2020 Electrical Engineering and Computer Science (EECS) Rising Stars. In addition, her work has led to several awards including two awards from the Israeli Ministry of Science (Award for Leading Applied Research and scholarship for Excelling Women in STEM) and the Eric and Wendy Schmidt Postdoctoral Award for Women in Mathematical and Computing Sciences.

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<https://emory.zoom.us/j/91543803144>

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