Toward Artificial Social Intelligence

Shiry Ginosar
Postdoctoral Fellow
Department of Electrical Engineering and Computer Sciences
University of California, Berkeley

Monday, March 20, 2023
10:00am – 11:00am
EEB248
Zoom Link: https://usc.zoom.us/j/93935933525?pwd=cVVWd2JoQzBhcXZuWDAzalp3eEZYUT09

Abstract: As the covid pandemic made abundantly clear—multi-faceted, face-to-face interaction is the most effective form of communication—much more so than written text messages or phone calls. And yet, most current AI efforts focus primarily on text systems. In my work, I try to push the limits of machine perception systems toward artificially intelligent agents that can perceive and model the rich, multimodal signals of face-to-face human social interaction: speech and communicative gesture. I will cover several projects that take steps in this direction in the one-to-many scenario of lectures and monologues and one-on-one dyadic face-to-face communication. Through these examples, I will argue that it is possible to model minute, indescribable visual and auditory details of multi-faceted human communication using data-driven methods without relying on annotation. I will then broaden the discussion to questions in social intelligence, such as body language, abstract communicative motion, and spatiotemporal trends of social norms, and suggest directions for future inquiries.

Bio: Shiry Ginosar is a Computing Innovation Postdoctoral Fellow at UC Berkeley, advised by Jitendra Malik. She completed her Ph.D. in Computer Science at UC Berkeley, under the supervision of Alyosha Efros. Prior to joining the Computer Vision group, she was part of Bjoern Hartmann's Human-Computer Interaction lab at Berkeley. Earlier in her career, she was a Visiting Scholar at the CS Department of Carnegie Mellon University, with Luis von Ahn and Manuel Blum in the field of Human Computation. Between her academic roles, she spent four years at Endeca as a Senior Software Engineer. In her distant past, Shiry trained fighter pilots in F-4 Phantom flight simulators as a Staff Sergeant in the Israeli Air Force. Shiry's research has been covered by The New Yorker, The Wall Street Journal, and the Washington Post, amongst others. Her work has been featured on PBS NOVA, exhibited at the Israeli Design Museum and is part of the permanent collection of the Deutsches Museum. Her patent-pending research work inspired the founding of a startup. Shiry has been named a Rising Star in EECS, and is a recipient of the NSF Graduate Research Fellowship, the California Legislature Grant for graduate studies, and the Samuel Silver Memorial Scholarship Award for combining intellectual achievement in science and engineering with serious humanistic and cultural interests.

Hosts: Dr Antonio Ortega, aortega@usc.edu