Abstract:
Designing robots for human interaction is a multifaceted challenge involving the robot's intelligent behavior, physical form, mechanical structure, and interaction schema. Our lab therefore develops and studies human-centered robots using a combination of methods from AI, Design, and Human-Computer Interaction. This talk focuses on four recent projects: A collaborative wearable robotic "third arm", a robot that helps human engineers make multi-objective design decisions, an emotive robotic skin that can produce goosebumps and spikes, and an open-source social robotics construction kit that is based on craft materials.

Bio:
Guy Hoffman is an Assistant Professor and the Mills Family Faculty Fellow in the Sibley School of Mechanical and Aerospace Engineering at Cornell University. Prior to that he was Assistant Professor at IDC Herzliya and co-director of the IDC Media Innovation Lab. Hoffman holds a Ph.D from the MIT Media Lab in the field of human-robot interaction. He heads the Human-Robot Collaboration and Companionship (HRC^2) group, studying the algorithms, interaction schema, and designs enabling close interactions between people and personal robots in the workplace and at home. Among others, Hoffman developed the world’s first human-robot joint theater performance, and the first real-time improvising human-robot Jazz duet. His research papers won several top academic awards, including Best Paper awards at HRI and robotics conferences in 2004, 2006, 2008, 2010, 2013, 2015, 2018, and 2019. His TEDx talk is one of the most viewed online talks on robotics, watched more than 3 million times.

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