Towards Peer-to-Peer Human-Robot Teaming

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Time : 3:00 p.m. – 4:00 p.m.
Venue : Room 215, William M. W. Mong Engineering Building, CUHK

Abstract

In peer-to-peer human-robot teaming, a primary objective is to create a style of cooperation between robot(s) and human(s) that is reminiscent of well-practiced human-only teams. In these human-only teams, the individuals have trained together, and understand intuitively how to interact with each other on the current task without the need for any explicit commands or conversations. In this interaction, the human performs tasks in a very natural manner, as he or she would when working with a human teammate; there is no need for PDAs, heads-up-displays, computers, or other types of graphical user interfaces (GUIs) to enable the human to communicate with the robot. This talk will discuss our recent work toward achieving this type of peer-to-peer human-robot interaction.

Biography

Dr. Lynne Parker is Professor and Associate Head in the Department of Electrical Engineering and Computer Science at the University of Tennessee, Knoxville, where she directs the research of the Distributed Intelligence Laboratory. Additionally, she holds an appointment as Adjunct Distinguished Research and Development Staff Member at Oak Ridge National Laboratory (ORNL), where she worked as a full time researcher for several years. Dr. Parker received her Ph.D. degree from the Massachusetts Institute of Technology (MIT), performing her research in MIT's Artificial Intelligence Laboratory, with a minor in brain and cognitive science. Dr. Parker conducts research in the areas of distributed robotics, human-robot interaction, sensor networks, and machine learning, and has published over 145 articles in these areas. For this research, she was awarded the PECASE (U.S. Presidential Early Career Award for Scientists and Engineers) in 2000. She is the Editor-in-Chief of the IEEE Robotics and Automation Society Conference Editorial Board, and served as an elected Administrative Committee (AdCom) Member of the IEEE Robotics and Automation Society for 6 years. She was a senior Editor of IEEE Transactions on Robotics for several years. She is serving as the Program Chair for IROS 2014, and the General Chair for ICRA 2015. She is a Fellow of IEEE.

***** ALL ARE WELCOME *****

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