Transparency for Robots: Why does it matter?

ABSTRACT
Robots are becoming more common and will become a larger part of our everyday lives. These robots will be making decisions regarding how to respond to known and previously unseen situations, often in the confluence of humans. Trust and explainability are considered important characteristics of the human-robot relationships, however, a significantly broader set of characteristics must be considered to develop robots that people truly understand. Transparency is the overall concept encompassing this broader set of characteristics necessary to enable human's understanding of the system relative to the system's intent, plans and reasoning. This presentation will define transparency and its implications on human understanding of robots across exemplar domains, such as pandemic contact tracing, ocean sampling, and heterogeneous swarms.

SPEAKER BIO
Julie A. Adams is the Associate Director of Research in the Collaborative Robotics and Intelligent Systems Institute, Professor of Computer Science in the School of Electrical Engineering and Computer Science, and Professor (courtesy) of Mechanical and Industrial Engineering in the School of Mechanical, Industrial and Manufacturing Engineering at Oregon State University. She was the founder of the Human-Machine Teaming Laboratory at Vanderbilt University, prior to moving the laboratory to Oregon State. Adams has worked in the area of human-machine teaming for over 25 years. Throughout her career she has focused on human interaction with unmanned systems, but also focused on manned civilian and military aircraft at Honeywell, Inc. and commercial, consumer and industrial systems at the Eastman Kodak Company. Adams received her M.S. and Ph.D. degrees in Computer and Information Sciences from the University of Pennsylvania and her B.S. in Computer Science and B.B.E. in Accounting from Siena College.

TUESDAY
June 1, 2021
Talk: 11:00-11:30 AM Pacific
Q/A: 11:30-11:45
Zoom: beav.es/tech-talk
Info: eecs.oregonstate.edu/tech-talk-tuesday

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