HUMANITY CENTERED ROBOTICS INITIATIVE

BROWN

Thomas Ryden
MassRobotics

"HRI Design Considerations For Robotics Systems"

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12:00-12:50
CIT 477 Lubrano

Abstract: Human-Robot interaction design is multidisciplinary effort aimed at understanding and improving the interactions between humans and robots. HRI is no more important than in teleoperated robots, where effective control is critical to the proper experience of these types of robots. But often the human factors elements are given short shrift, either addressed towards the end of the design, or left to just the engineers. During this talk we will look at some of the different elements of HRI – human perception of robots, human factors and human machine interfaces. We will look at how the design requirements of the PackBot impacted the control metaphors and we will examine the design path for the VGo Telepresence Robot.

Thomas Ryden is the Executive Director of MassRobotics. MassRobotics is a non-profit organization whose mission is to support the robotics community and help grow the next generation of robotics and connected device companies. Prior to joining MassRobotics Mr. Ryden was the founder and CEO/COO of VGo Communications, Inc. While at VGo Mr. Ryden oversaw the development and launch of the VGo telepresence robot. The VGo is used by hospitals, eldercare facilities, schools and other organizations to help people stay better connected, allowing users to essentially be in two places at once. Previously, Mr. Ryden was Director of Sales & Marketing at iRobot Corporation. Under his leadership iRobot secured over $300M in contracts and revenue from its government and industrial products increased from $2M to over $80M annually. In addition Mr. Ryden held roles in program management, overseeing the development of some of iRobot's most successful products. Mr. Ryden is the co-chairman of the robotics cluster of the Massachusetts Technology Leadership Council and serves on the Mechatronics & Robotics Engineering (MRE) Education Advisory Board, the Tufts University Computer Science Advisory Board, the WPI Robotics Engineering Advisory Board and the Robotics Technical Advisory Panel for ASME. He also is an advisor to a number of robotics start-ups. Mr. Ryden has a B.S. in Electrical Engineering from the University of Vermont and an MBA from Bentley University.

Host: Stefanie Tellex/HCRI