HUMANITY CENTERED ROBOTICS INITIATIVE

BROWN

Kerstin Haring
US Air Force Academy

"Human-Machine Teaming"

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12:00
CIT 477 Lubrano

Abstract: Advancements in technology have led to complex and sophisticated computerized systems advancing to the stage that they are no longer used exclusively as a tool but as system that operates like a teammate to the human user. Research at the US Air Force Academy Warfighter Effectiveness Research Center (WERC) focuses on how introducing modern technology affects human-machine teaming in which the machine team member is supporting the human in a mission with the unique capabilities machines like robots, autonomous fighter jets, and artificial intelligence can contribute. To successfully introduce machines into human teams, the role and effect has to be evaluated from a human-centric approach including human factors, sociology, and cognitive psychology perspectives. This talk includes approaches on evaluating the social status of machines within teams, compliance with robot requests, communication and teaming perception with autonomous systems, and the influence of the form and function of robots.

Kerstin Haring is a one of the leading researchers at the Warfighter Effectiveness Research Center (WERC), Department of Behavioral Sciences and Leadership (DFBL) at the United States Air Force Academy (USAFA). She completed her PhD in Advanced Interdisciplinary Sciences, Cognitive Science, and Human Robot Interaction at the University of Tokyo in Japan and her Master in Computer Science at the University of Freiburg in Germany. She is seeking to enhance shared situational awareness in human-machine teaming and increase the effectiveness of collaborations in Human Robot Interactions. Her research evaluates trust and teaming with robots, seeks to understand the mechanisms enabling mixed human-machine collaborations, investigates the effects of introducing technology in military and civilian teams, as well as real world applications of modern technology in mixed human-machine teams.

Host: Bertram Malle/HCRI