

## Artificial Intelligence for Human-Robot Interaction (AI-HRI)

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### Day 1: Thursday, November 7 (Full Day)

**09:00 – 09:15**    **Introductions and Announcements**

**09:15 – 10:15**    **Invited Speaker: Michael Gleicher (45-minute presentation + 15-minute Q&A)**

**10:15 – 10:30**    **Breakout Session: Topics and Team-ups**

**10:30 – 11:00**    **Coffee Break**

**11:00 – 12:30**    **Long Paper Presentations (12-minute presentation + 3-minute Q&A)**

*Towards A Robot Explanation System: A Survey and Our Approach to State Summarization, Storage and Querying, and Human Interface*

Zhao Han, Jordan Allspaw, Adam Norton, and Holly Yanco

*Petri Net Machines for Human-Agent Interaction*

Christian Dondrup, Ioannis Papaioannou, and Oliver Lemon

*Language-guided Adaptive Perception with Hierarchical Symbolic Representations for Mobile Manipulators*

Ethan Fahnstock, Siddharth Patki, and Thomas Howard

*Four-Arm Manipulation via Feet Interfaces*

Jacob Hernandez, Walid Amanhoud, Anaïs Haget, Hannes Bleuler, Aude Billard, and Mohamed Bouri

*Unclogging Our Arteries: Using Human-Inspired Signals to Disambiguate Navigational Intentions*

Justin Hart, Reuth Mirsky, Stone Tejada, Bonny Mahajan, Jamin Goo, Kathryn Baldauf, Sydney Owen and Peter Stone

*Automated Production of Stylized Animations for Social Robots*

Adrian Ball and Ross Mead

**12:30 – 14:00**    **Lunch**

**14:00 – 15:00**    **Breakout Session**

**15:00 – 15:30**    **Lightning Talks (4-minute presentation + 1-minute Q&A)**

*A Research Platform for Multi-Robot Dialogue with Humans*

Matthew Marge, Stephen Nogar, Cory Hayes, Stephanie Lukin, Jesse Bloecker, Eric Holder, and Clare Voss

*Fuzzy Knowledge-Based Architecture for Learning and Interaction in Social Robots*

Mehdi Ghayoumi and Maryam Pourebadi

*Multimodal Dataset of Human-Robot Hugging Interaction*

Kunal Bagewadi, Joseph Campbell, and Heni Ben Amor

*Towards Development of Datasets for Human Action Understanding in Human-Robot Interaction*

Megan Zimmerman and Shelly Bagchi

*Responsive Planning and Recognition for Closed-Loop Interaction*

Richard Freedman, Yi Ren Fung, Roman Ganchin and Shlomo Zilberstein

*Adaptable Human Intention and Trajectory Prediction for Human-Robot Collaboration*

Abulikemu Abuduweili, Siyan Li, and Changliu Liu

**15:30 – 16:00**    **Coffee Break + Poster Session**

**16:00 – 17:00**    **Invited Speaker: Manuela Veloso (45-minute presentation + 15-minute Q&A)**

**17:00 – 17:30**    **Poster Session (cont'd)**

**18:00 – 19:00**    **Reception**

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### Day 2: Friday, November 8 (Full Day)

**09:00 – 09:15    Announcements**

**09:15 – 10:15    Invited Speaker: Laura Hiatt (45-minute presentation + 15-minute Q&A)**

**10:15 – 10:30    Breakout Session: Topics and Team-ups**

**10:30 – 11:00    Coffee Break**

**11:00 – 12:30    Long Paper Presentations (12-minute presentation + 3-minute Q&A)**

*Enabling Intuitive Human-Robot Teaming Using Augmented Reality and Gesture Control*  
Jason Gregory, Christopher Reardon, Kevin Lee, Geoffrey White, Ki Ng, and Caitlyn Sims

*Negotiation-based Human-Robot Collaboration via Augmented Reality*  
Kishan Chandan, Xiang Li, and Shiqi Zhang

*An Alert-Generation Framework for Improving Resiliency in Human-Supervised, Multi-Agent Teams*  
Sarah Al-Hussaini, Jason M. Gregory, Shaurya Shriyam, and Satyandra K. Gupta

*Trust and Cognitive Load During Human-Robot Interaction*  
Muneeb Ahmad, Jasmin Bernotat, Katrin Lohan, and Friederike Eyszel

*Towards an Adaptive Robot for Sports and Rehabilitation Coaching*  
Martin Ross, Frank Broz, and Lynne Baillie

*Selfie Drone Stick: A Natural Interface for Quadcopter Photography*  
Saif Alabachi, Gita Sukthankar, and Rahul Sukthankar

**12:30 – 14:00    Lunch**

**14:00 – 15:00    Invited Speaker: Matthew Marge (45-minute presentation + 15-minute Q&A)**

**15:00 – 15:30    Lightning Talks (3-minute presentation + 2-minute Q&A)**

*MAD-TN: A Tool for Measuring Fluency in Human-Robot Collaboration*  
Seth Issacson, Gretchen Rice, and James Boerkoel

*Building Second-Order Mental Models for Human-Robot Interaction*  
Connor Brooks and Daniel Szafir

*Commitments in Human-Robot Interaction*  
Victor Fernandez Castro, Aurelie Clodic, Rachid Alami, and Elisabeth Pacherie

*Developing Computational Models of Social Assistance to Guide Socially Assistive Robots*  
Jason Wilson, Seongsik Kim, Ulyana Kurylo, Joseph Cummings and Eshan Tarneja

*Towards Effective Human-AI Teams: The Case of Collaborative Packing*  
Gilwoo Lee, Christoforos Mavrogiannis and Siddhartha Srinivasa

*An Automated Vehicle like Me? The Impact of Personality Similarities and Differences between Humans and AVs*  
Qiaoning Zhang, Connor Esterwood, Xi Jessie Yang and Lionel Robert

**15:30 – 16:00    Coffee Break + Poster Session**

**16:00 – 16:30    Poster Session (cont'd)**

**16:30 – 17:30    Breakout Session**

**18:00 – 19:30    Plenary Session**

**Day 3: Saturday, November 9 (Half Day)**

**09:00 – 09:15    Announcements**

**09:15 – 10:00    Tech Talks (12-minute presentation + 3-minute Q&A)**

*Where is My Stuff? An Interactive System for Spatial Relations*  
Emrah Sisbot and Jonathan Connell

*Solving Service Robot Tasks: UT Austin Villa@Home 2019 Team Report*  
Rishi Shah, Yuqian Jiang, Haresh Karnan, Gilberto Briscoe-Martinez, Dominick Mulder, Ryan Gupta, Rachel Schlossman, Marika Murphy, Justin Hart, Luis Sentis, and Peter Stone

*MuMMER: Socially Intelligent Human-Robot Interaction in Public Spaces*  
Mary Ellen Foster and Olivier Canévet

**10:00 – 10:30    Tech Discussion: Haves, Needs, and Wants**

**10:30 – 11:00    Coffee Break**

**11:00 – 12:00    Future Directions and Discussion**

**12:00 – 12:30    Wrap-up and Closing Remarks**