

SAMANTHA REIG

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EDUCATION

Ph.D. in Human-Computer Interaction, 2023

Carnegie Mellon University, Pittsburgh, PA USA

Thesis: *Characterizing the Role of Agent Identities in Interactions Among Individuals, Embodiments, and Services*

Advisors: Jodi Forlizzi, Aaron Steinfeld

M.S. in Human-Computer Interaction, 2020

Carnegie Mellon University, Pittsburgh, PA USA

B.A. in Psychology and Information Science, 2017

Cornell University, Ithaca, NY USA

PROFESSIONAL APPOINTMENTS

Assistant Professor, 2023 - present

Miner School of Computer & Information Sciences, University of Massachusetts Lowell

PUBLICATIONS

(Google Scholar metrics as of 06/01/2024: citations: 530, h-index: 12, i-10 index: 12)

Conference publications (peer-reviewed)

- C.17 **Reig, S.**, Fong, T., Carter, E., Steinfeld, A., Forlizzi, J. (2024). Contrasting Affiliation and Reference Cues for Conversational Agents in Smart Environments. To appear in *IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*.
- C.16 Chang, M.L., Lee, A., Han, N., Huang, A., Simão, H., **Reig, S.**, Ali, A., Martinez, R., Khanuja, N., Zimmerman, J., Forlizzi, J., Steinfeld, A. (2024). Dynamic Agent Affiliation: Who Should the AI Agent Work for in the Older Adult's Care Network? To appear in *ACM Conference on Designing Interactive Systems (DIS)*.
- C.15 **Reig, S.**, Carter, E., Kirabo, L., Fong, T., Steinfeld, A., Forlizzi, J. (2023). Dreaming up smart home futures: a story completion study. In *IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*, pages 1020-1027.
- C.14 **Reig, S.**, Cruz, E., Powers, M., He, J., Chong, T., Tham, Y.J., Kratz, S., Robinson, A., Smith, B., Vaish, R., Monroy-Hernández, A. (2023). Supporting Piggybacked Co-Located Leisure Activities via Augmented Reality. In *ACM International Conference on Human Factors in Computing Systems (CHI)*, article no. 788, pages 1-15.
- C.13 Bejarano, A., **Reig, S.**, Senapati, P., & Williams, T. (2022). You had me at hello: The impact of robot group presentation strategies on mental model formation. In *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*, pages 363-371.
- C.12 **Reig, S.**, Carter, E., Kirabo, L., Fong, T., Steinfeld, A., Forlizzi, J. (2021). Smart home agents and devices of today and tomorrow: surveying use and desires. In *ACM International Conference on Human-Agent Interaction (HAI)*, pages 300-304.
- C.11 **Reig, S.**, Luria, M., Forberger, E., Won, I., Steinfeld, A., Forlizzi, J., Zimmerman, J. (2021). Social robots in service contexts: exploring the rewards and risks of personalization and re-embodiment. In *ACM Conference on Designing Interactive Systems (DIS)*, pages 1390-1402.

- C.10 **Reig, S.**, Carter, E., Fong, T., Forlizzi, J., Steinfeld, A. (2021). Flailing, hailing, prevailing: perceptions of multi-robot failure recovery strategies. In *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*, pages 158-167.
- C.9 Cambre, J., **Reig, S.**, Kravitz, Q., Kulkarni, C. (2020). All Rise for the AI Director: Eliciting Possible Futures of Voice Technology through Story Completion. In *ACM Conference on Designing Interactive Systems (DIS)*, pages 2051-2064.
- C.8 **Reig, S.**, Luria, M., Wang, J.Z., Oltman, D., Carter, E., Steinfeld, A., Forlizzi, J., Zimmerman, J. (2020). Not some random agent: multi-person interaction with a personalizing service robot. In *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*, pages 289-297.
*Best Paper Honorable Mention
- C.7 Carter, E., **Reig, S.**, Tan, X.Z., Laput, G., Rosenthal, S., Steinfeld, A. (2021). Death of a robot: social media reactions and language use when a robot stops operating. In *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*, pages 589-597.
- C.6 Roth, A.M., **Reig, S.**, Bhatt, U., Shulgach, J., Amin, T., Doryab, A., Fang, F., Veloso, M. (2019). A Robot's Expressive Language Affects Human Strategy and Perceptions in a Competitive Game. In *IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*.
- C.5 Tan, X.Z., Carter, E., **Reig, S.**, Steinfeld, A. (2019). Go That Way: Exploring Supplementary Physical Movements by a Stationary Robot when Providing Navigation Instructions. In *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, pages 299-311.
- C.4 Tan, X.Z., **Reig, S.**, Carter, E., Steinfeld, A. (2019). From One to Another: How Multi-Robot Interaction Affects Users' Perceptions Following a Transition. In *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*, pages 114-122.
- C.3 Luria, M., **Reig, S.**, Tan, X.Z., Steinfeld, A., Forlizzi, J., Zimmerman, J. (2019). Re-embodiment and co-embodiment: exploration of social presence for robots and conversational agents. In *ACM Conference on Designing Interactive Systems (DIS)*, pages 633-644.
- C.2 **Reig, S.**, Norman, S., Morales, C., Das, S., Steinfeld, A., Forlizzi, J. (2018). A Field Study of Pedestrians and Autonomous Vehicles. In *ACM International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutomotiveUI)*, pages 198-209.
- C.1 Stoll, B., **Reig, S.**, He, L., Kaplan, I., Jung, M., Fussell, S. (2018). "Wait, can you move the robot?": Examining telepresence robot use in collaborative teams. In *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*, pages 14-22.

Journal publications (peer-reviewed)

- J.2 **Reig, S.**, Fong, T., Forlizzi, J., Steinfeld, A. (2022). Theory and design considerations for the user experience of smart environments. *IEEE Transactions on Human-Machine Systems*, vol. 52, issue 3, pages 522-535.
- J.1 **Reig, S.**, Carter E., Tan X.Z., Steinfeld, A., Forlizzi, J. (2021). Perceptions of agent loyalty with ancillary users. *International Journal of Social Robotics*, vol. 13, issue 8, pages 2039-2055.

Short papers, workshop papers, and posters (lightly peer-reviewed)

- S.8 Chang, M.L., **Reig, S.**, Lee, A., Simão, H., Khanuja, N., Zimmerman, J., Forlizzi, J., Steinfeld, A. (2023). Understanding Boundaries of Agent Intervention for Adults With and Without Mild Cognitive Impairment. Paper at *CHI 2023 Workshop on The Future of Hybrid Care and Wellbeing in HCI*.
- S.7 Hammer, J., **Reig, S.** (2022). From Individual Rights to Community Obligations: A Jewish Approach to Speech. In *ACM Interactions* 29 (4).
- S.6 **Reig, S.**, Carter, E., Fong, T., Steinfeld, A., Forlizzi, J. (2022). Perceptions of Explicitly vs. Implicitly Relayed Commands between a Robot and a Smart Speaker. In *Companion of the 2022 ACM/IEEE Conference on Human-Robot Interaction (HRI)*.
- S.5 **Reig, S.**, Carter, E., Kirabo, L., Fong, T., Steinfeld A., Forlizzi, J. (2021). Smart Home Agents and Devices of Today and Tomorrow: Surveying Use and Desires. Poster at *ACM Conference on Human-Agent Interaction (HAI) 2021*.
- S.4 **Reig, S.**, Steinfeld, A., Forlizzi, J. (2020). Structured User Enactments to Evoke Future-Based Reflections on the Present. Paper at *CHI 2020 Design Fictions Workshop* (canceled due to COVID).
- S.3 **Reig, S.**, Forlizzi, J., Steinfeld, A. (2019). Leveraging Robot Embodiment to Facilitate Trust and Smoothness. In *Companion of the 2019 ACM/IEEE Conference on Human-Robot Interaction (HRI)*.
- S.2 **Reig, S.**, Steinfeld, A., Forlizzi, J. (2018). Agent embodiment and perceptions of intent. Poster at *RSS 2018 Women in Robotics Workshop*.
- S.1 Stoll, B. **Reig, S.**, Jung, M.F., Fussell, S. (2017). Examining the effects of Mobile Robotic Telepresence Systems in Collaborative Teams. Poster at *CSCW 2017 Robots in Groups and Teams Workshop*.

HONORS AND AWARDS

NASA Space Technology Graduate Research Fellowship, 2019

Project: *Intelligence in Motion: Re-Embodiment, Trust, and Failure in Human-Robot Interaction*

PI: Aaron Steinfeld, Mentor: Terry Fong

Graduate Student Service Award, 2022

Carnegie Mellon University

Part of a team of 15 students to receive this award for development of the graduate course “CS-JEDI: Justice, Equity, Diversity, and Inclusion in Computer Science”

Special Recognition for Outstanding Review

DIS Papers and Pictorials: 2022

CHI Papers: 2021

Best Paper Honorable Mention, 2020

For “Not Some Random Agent: Multi-Person Interactions with a Personalizing Service Robot” at *HRI 2020*

“Most Creative Elevator Pitch”, 2021

HRI 2021 Student Elevator Pitch Competition

HRI Pioneers, 2019

Selected to attend and present at premiere workshop for student researchers in the field of human-robot interaction

Phi Beta Kappa Society, 2017

Cornell University

Last updated: June 2024

Dean's List

Cornell University: 2013, 2014, 2015, 2016

INVITED TALKS, PANELS, AND OUTREACH

HRI workshop on Robo-Identity: Designing for Identity in the Shared World, 2024

Keynote: Robot Identities as Mediating Technologies: Design Opportunities, Risks, and Future Directions

Tufts University HRI seminar, 2024

Talk: Designing and Understanding the Role of AI Identities and Embodiments in Socially Complex Human-Robot Interactions

Miner School Research Symposium: Focus on the Future, 2023

Talk: Appropriate and Trustworthy AI in Physically and Socially Complex settings

NASA Habitats Optimized for Missions of Exploration (HOME) STRI seminar, 2022

Talk: Theory and Design Considerations for the User Experience of Smart Environments

Talking Robotics virtual seminar/podcast, 2022

Talk: "Characterizing Agent Identities as Mediators Among Individuals, Embodiments, and Services"

Available online: https://www.youtube.com/watch?v=TJJwLk5_tlQ

NIDILRR RERC Project Directors' Meeting, 2022

Panel on Wearables and IOT/Smart Homes

ValleyML AI Expo, 2020

Panel on "Inspiration of Robotic Forms"

STEM4elle STEM Initiative for Girls, 2020

Interactive session on HRI

CMU Women@SCS PhD kickoff event, 2020

Panel on "Women PhDs Thriving Together: Different Departments, Different Perspectives"

Institute of Transportation Engineers (ITE), 2019

Webinar on "Connected/Autonomous Vehicles and Active Transportation"

CMU HCII REU Program Summer Seminar, 2019

Panel on "Applying to Grad School"

TEACHING

COMP 5270: Human-Computer Interaction, UMass Lowell, Spring 2024. Enrollment: 39.

COMP 5500: Special Topics in CS: Human-AI Interaction, UMass Lowell, Fall 2023. Enrollment: 12.

SERVICE

Conference organizing

HRI 2025 Student Design Competition Chair

Last updated: June 2024

HRI 2020 Pioneers General Chair

Program Committee (PC) member

ACM International Conference on Human Robot Interaction (HRI): 2024

ACM Conference on Designing Interactive Systems (DIS): 2023

Associate Editor (AE)

ACM Transactions on Human-Robot Interaction (THRI): 2024 - present

Peer reviewing

ACM International Conference on Human Factors in Computing Systems (CHI): 2024, 2023, 2022, 2021, 2019

ACM/IEEE International Conference on Human-Robot Interaction (HRI): 2023, 2022, 2021, 2020, 2019, 2018

ACM Conference on Computer-Supported Cooperative Work (CSCW): 2020

ACM Conference on Designing Interactive Systems (DIS): 2023, 2022

ACM Conference on Human-Agent Interaction (HAI): 2023, 2021

IEEE Symposium on Robot and Human Interactive Communication (RO-MAN): 2024, 2023, 2020

Frontiers in Robotics and AI: 2022, 2021

International Journal of Social Robotics (SORO): 2023, 2022, 2021, 2020, 2019

Transactions on Human-Robot Interaction (THRI): 2023, 2021, 2019, 2018, 2017

Journal of New Media and Society: 2021

IEEE Robotics and Automation Letters (RA-L): 2021

DIS Provocations and Works in Progress: 2023

HRI Pioneers Workshop: 2024, 2023, 2022, 2021

HRI Late-Breaking Reports: 2022

CHI Workshops: 2019

CHI Late-Breaking Work: 2022

HAI Posters: 2021

Workshop organizing

HRI Workshop on Robo-Identity, HRI 2022

School and College service at UMass Lowell

Miner School tenure track faculty search committee, 2023-2024

Miner School tour guide at UMass Lowell Open House, 2023

Department and School service at Carnegie Mellon

PhD Ombudsperson, Human-Computer Interaction Institute, 2021-2022

Member, CMU SCS PhD Dean's Advisory Committee, 2021

Open House Coordinator, Human-Computer Interaction Institute, 2021

SCS graduate application assistance program mentor, 2020-2021

Organizer, Panel on "Writing Your HCII Thesis", 2020

HCII PhD Representative, CMU Graduate Student Assembly (GSA), 2019-2020

Producer/musical director/performer, CMU SCS Graduate Student Musical, 2018-2020

PhD student representative at HCII faculty meetings, 2019-2021

Member, HCII Diversity, Equity, and Inclusion (DEI) Committee, 2020-2021

Led effort to document graduate student departmental service roles, 2020-2021

Interviewed students about program requirements and summarized the results for discussion among students and faculty, 2020

Contributed to inclusiveness-focused heuristic evaluation of department course and presented on results to faculty, 2020-2021

Other research community activities

Participant in Computing Community Consortium Robotics Roadmapping Meeting, Austin, TX, 2023

Panelist for “PhD in HCI office hour” hosted by Dr. Michael Nebeling (U of Michigan), Zoom, 2023

ADVISING AND MENTORING

Advisees

Aditya Kumar Gupta, UMass Lowell MS student, 2023 - present

Mentees

Irene Kang, CMU summer REU student, 2022

Winnie Lin, CMU summer REU student, 2022

Elsa Forberger, CMU summer REU student, 2021

Isabel Won, CMU summer REU student, 2021

Danielle Oltman, CMU summer REU student, 2020

Janet Wang, CMU summer REU student, 2020