Jenny Xiyu Fu

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Research interests

AI-Mediated Communication, Technology for Wellbeing, Social Psychology of Algorithms

Education

2020 – Present **Cornell University** – Ithaca, NY
PhD in Information Science, minor in Organizational Behavior *GPA: 4.0/4.0.*

2016 – 2020 **Brown University** – Providence, RI
B.Sc. in Cognitive Science with Honors *GPA: 3.7/4.0.*

Selected coursework

- *Computing*: Quantitative research method, LLM, NLP text analysis
- *Design*: Design research, Redesigning robot, Human-AI interaction design

Honors and scholarships

2023, 2022, 2021 Graduate School Research Travel Award (Cornell University)
2022 Mixed Reality Retreat Travel Fund (Cornell University)
2022 Grace Hopper Celebration Award (Cornell University)
2021 CS Research Mentorship Program Recipient (Google)
2018 Linking Internship and Knowledge Award (Brown University)
2019 Karen T. Romer Teaching and Research Awards (Brown University)

Publications

2023 **Negotiating Dyadic Interactions through the Lens of Augmented Reality Glasses.**
Fu, X. J*., Chung, J. W*., Deocadiz-Smith, Z., Jung, M. F., Huang, J.
In Proceedings of the 2023 ACM Designing Interactive Systems Conference (pp. 493-508).

2023 **The Role of Inclusion, Control, and Ownership in Workplace AI-Mediated Communication.**
Kadoma, K., Quere, M. A. L., **Fu, J**., Munsch, C., Metaxa, D., Naaman, M.
arXiv preprint, accepted to CHI 2024.

2023 **CORAE: A Tool for Intuitive and Continuous Retrospective Evaluation of Interactions.**
Sack, M. J., Parreira, M. T., **Fu, X. J**., Lipman, A., Javed, H., Jamali, N., Jung, M.
In International Conference on Affective Computing and Intelligent Interaction (pp. 1-8).

2022 **Interaction Prototyping With Video: Bridging Video Interaction Analysis & Design.**
Pelikan, H. R., Hou, Y. T. Y., **Fu, X. J**., Keevallik, L., Broth, M., Jung, M. F.
In CHI Conference on Human Factors in Computing Systems Extended Abstracts (pp. 1-4).

2021 **Speed Dating with Voice User Interfaces: Understanding How Families Interact and Perceive Voice User Interfaces in a Group Setting.**
Ostrowski, A. K., **Fu, X. J**., Zygouras, V., Park, H. W., Breazeal, C.
Frontiers in Robotics and AI, 8.

Research experience

2023 **Social Technologies Research Group, Cornell Tech**
Advisor: Dr. Mor Naaman (PI)
Workplace AI- Mediated Communication: Researched the social and psychological impact of AI system on identity in workplace setting.

2022 **Human-Computer Interaction Lab, Brown University**
Advisor: Dr. Jeff Huang (PI)
Building Consensual Human-AR Glasses Interaction: Researched self-presentation with AR glasses through participatory design and semi-structured interviews.

2021 – Present **Robots in Groups Lab, Cornell University**
Advisor: Dr. Malte Jung (PI)
Social AI- Mediated Communication: Researched people's self-perception in communicating emotions through text and visual algorithms.
Redesigning Human-Robot Interaction: Collaborated with the Statler Hotel and the Gettys Group to design future hospitality robots, including leading interviews, user observation, benchmarking, sketching and storyboarding; Developed iterations of prototypes with 3 team members of different backgrounds, conducted contextual inquiries with stakeholders including Hotel management team, chefs, and staffs.

2017 – 2020 **Social Cognitive Science Research Lab, Brown University**

Advisors: Dr. Bertram Malle (PI), Dr. Xuan Zhao, Dr. Maartje de Graaf, Dr. Elizabeth Phillip

Empathy and Prosocial Behavior: Collected over 150 behavioral data; Curated data using Excel; Maintained the experiment device; Trained 2 assistants for data collection; Edited video clips.

Moral Reasoning: Coded behavioral explanations on collected data; Designed and coded a MATLAB model to simplify the F. Ex coding- a coding scheme for folk explanations of behavior.

Perspective Switching: Wrote up and managed the human subject pool application; Trained 3 assistants for data collection.

Robotic Appearance: Assisted with the design of the first iteration of the project; Categorized and analyzed over 250 images of robots.

2019 **Personal Robots Group, MIT Media Lab**

Advisors: Dr. Cynthia Breazeal (PI), Dr. Hae Won Park, Dr. Anastasia Ostrowski

Robotic Emotional Engagement: Designed and built a rotating platform feature for the voice agent using Arduino (C/C++) and Solidworks; Collected, analyzed, and visualized behavioral data of 37 participants using Jupyter notebook (Python); Reviewed and edited a conference paper about trust, emotional engagement, and characteristic perceptions of social robots.

Older Adults Robotic Trust Design: Assisted with design sessions exploring older adults' perceptions of social robots; Transcribed audio interviews.

2018 **Socio-Cognitive Processes Lab, Princeton University**

Advisors: Dr. Alin Coman (PI), Dr. Janet Pauketat

Emotional Synchronization: Transcribed and quantified linguistic data; Analyzed preliminary data using RStudio; Created visualizations to present the study results.

Blame Assignment: Designed and wrote up a research proposal about blame assignment within various social contexts and developed stimuli.

2018 **Virtual Environment Navigation Lab, Brown University**

Advisor: Dr. William Warren (PI)

Motion Capture: Processed motion capture data and maintained data files; Updated existing programs written in MATLAB.

Industry experience

2024 – Present **Honda Research Institute**
Human Understanding in Physical Human-Robot Interaction: Design and conduct exploratory design sessions to examine human acceptance of robot initiate actions; Developed software to analyze qualitative and quantitative data.

2022 – 2023 **Honda Research Institute**
Social Dynamics in Human-Human-Robot Interaction: Designed interaction model to measure interpersonal group dynamics through video and inform machine learning system design; Developed empirical study protocols to analyze multimodal emotional and behavioral data.

2022 **Exponent**
AR-Mediated Social Interaction: Conducted qualitative and quantitative user studies on users' acceptance and trust of smart glasses using A/B testing and semi-structured interviews.

Talks

Oct 2023 Negotiating Dyadic Interactions through the Lens of Augmented Reality Glasses
Cornell XR Monthly

July 2023 Negotiating Dyadic Interactions through the Lens of Augmented Reality Glasses
ACM Designing Interactive Systems Conference '23

Nov 2022 Exploring Mediated Social Cognition in Augmented Reality
Psychology of Technology '22

April 2022 A Tool but not a Peer: How Tool-Based Framing affects People's Perceptions of Robot Teammates
HRI '22 Robo-Identity 2 Workshop

April 2022 Designing minimal sounds for maximum interaction
IEEE International Conference on Robotics and Automation (ICRA), Sound for Robots 2022 Workshop

Community services

2021 – Present **Peer review**
Computers in Human Behavior, Transactions on Human-Robot Interaction, CHI, HRI, DIS, Creativity and Cognition

2021 – Present **Volunteer**
HRI, CHI, CSCW

2021 – Present **Mentorship**
New Visions Engineering, Admission Committee, First year mentoring

2016 – 2020 **Brown**
Department student representative, Global engagement office ambassador, debate team social engagement chair

Technical skills

Data Analysis & Development
Proficient in: R, Python, LaTeX
Familiar with: HTML, CSS, Git, JavaScript, Matlab

UX Research & Design
Methodologies: User Surveys, Conversational Analysis, User Interaction Design, Video Ethnography, Interviews, Focus Groups, Participatory Design
Tools: Figma, Prolific, Qualtrics

Rapid Prototyping
Skills: Arduino Programming, 3D Printing, Laser Cutting

Language Proficiency
English (Bilingual), Mandarin Chinese (Bilingual)

Other interests

Fencing, Photography, Video Editing