Xiyu (Jenny) Fu

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jennyfu@infosci.cornell.edu | xiyujennyfu.com | (401)301-2171

RESEARCH INTERESTS: AI- mediated communication, design research, emotional regulation

EDUCATION

2020-present **Ph.D.** in Information Science (GPA 4.0/4.0)
Minor in Organizational Behavior
Cornell University
Advisor: Dr. Malte Jung

2016-2020 **B.Sc.** in Cognitive Science with Honors (GPA 3.7/4.0)
Brown University
Advisor: Dr. Bertram Malle

PUBLICATIONS

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

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

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

Sack, M. J., Parreira, M. T., **Fu, J.**, Lipman, A., Javed, H., Jamali, N., & Jung, M. (2023). CORAE: A Tool for Intuitive and Continuous Retrospective Evaluation of Interactions. *arXiv preprint arXiv:2306.16629*.

CONFERENCE PRESENTATIONS

Fu J., Chung J. W., Huang J., & Jung, F. M. (2023). Negotiating Dyadic Interactions through the Lens of Augmented Reality Glasses. *ACM Designing Interactive Systems Conference '23*.

Fu J., Chung J. W., Huang J., & Jung, F. M. (2022). Exploring Mediated Social Cognition in Augmented Reality. *Psychology of Technology '22*.

Fu J., Lipman A., Lee R., & Jung, F. M. (2022). A Tool but not a Peer: How Tool-Based Framing affects People's Perceptions of Robot Teammates. *HRI '22 Robo-Identity 2 Workshop*.

Hannah Pelikan, **Jenny Fu,** Yoyo Tsung-Yu Hou, Asher Lipman, Qiyu Hu, and Malte F. Jung. 2022. Designing minimal sounds for maximum interaction, *In IEEE International Conference on Robotics and Automation (ICRA), Sound for Robots 2022 Workshop*.

AWARDS & HONORS

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*

RESEARCH EXPERIENCE

2023-present **Social Technologies Research Group,** *Cornell Tech*
Advisor: Dr. Mor Naaman (PI)

- **Workplace AI- Mediated Communication:** Researched the impact of AI system on gender in workplace setting.

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 auto completes.
- **Building Consensual Human-AR Glasses Interaction:** Researched self-presentation with AR glasses through participatory design and semi-structured interviews.
- **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 background, 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, 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 Design Research:** 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 Research:** Processed motion capture data and

WORK EXPERIENCE

2022-2023 **Honda Research**

- **Social Dynamics in Human-Human-Robot Interaction**: Designed models to measure interpersonal group dynamics and inform machine learning system design; Developed empirical study protocols to analyze multimodal human emotional and behavioral data.

2022 **Exponent**

- **Human Factor Intern in Mixed Reality Interaction**: Conducted qualitative and quantitative user studies on users' perceptions of smart glasses using A/B testing and semi-structured interviews.

COMMUNITY SERVICES

Peer Review	Computers in Human Behavior, Creativity & Cognition 2021, DIS 2022
Volunteer	HRI 2021, CHI 2021, CSCW 2021
Mentorship	Mentor, New Visions Engineering Mentor, Information Science First year PhD Student Admission Committee, Cornell ISGSA
Brown	Student Representative, Cognitive (Neuro)Science Department Student Ambassador, Office of Global Engagement Social Engagement Chair, Brown Debate Team

SKILLS

Qualitative	Project management, design research, lab experimental design, interaction design, interview and focus groups, survey design and analysis, A/B testing, persona development, user observation, scientific writing, video interaction analysis, usability testing, Wizard of Oz experiment
Programming	MATLAB, Python
Stats Analysis	Python (Jupyter Notebook, RStudio), SPSS, JASP, Excel
Brain Imaging	Design and conduct fMRI experiment for a course's final project; Create stimuli and analyze data in MATLAB (Psychtoolbox, SPM-12)
Engineering	Arduino, CAD 3D printing (Fusion 360, Rhinoceros 3D), Laser cutting
Web	HTML CSS, JavaScript
Design	Final Cut Pro, Photoshop, Adobe XD, Adobe Illustrator, Sketch, Balsamiq, Invision, Figma, Miro
Media	Photography, video and audio editing
Languages	English (Proficient), Mandarin (Native), German (Introductory)
Others	Prolific, Qualtrics, MTurk