Qiaosi Wang

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Research Interests: human-centered AI, human-AI interaction, responsible AI, AI agent, socially intelligent AI, Theory of Mind theory

EDUCATION

Aug 2018 – July 2024 (Expected)
Georgia Institute of Technology | Atlanta, GA
Ph.D. in Human-Centered Computing (specialization: Cognitive Science)
Thesis: Mutual Theory of Mind for Human-AI Communication in AI-Mediated Social Interaction
Advisor: Ashok K. Goel
Committee: Munmun De Choudhury, Betsy DiSalvo, Q. Vera Liao, Lauren Wilcox

Aug 2013 – June 2018
University of Washington | Seattle, WA
B.S. in Informatics and Psychology
GPA: 3.76/4.0 (Cum Laude - Top 20% in Class)

HONORS & AWARDS

Nov 2021 | Georgia Tech 2021 Foley Scholar Award Winner ($5000 reward)
Highest award for student excellence in research contributions to computing

Aug 2020 | Best Student Paper Award at Learning@Scale '20

Feb 2020 | Semifinalist in IBM AI Prize Competition - emPrize Team

Jun 2019 | Best Paper Award at DIS'19

Jun 2018 | University of Washington Dean's List (10 quarters)

Sep 2016 | Psi Chi - International Psychology Honor Society

PUBLICATIONS & PRESENTATIONS

Referred Journal Articles | Qiaosi Wang, Ida Camacho, Shan Jing, and Ashok K. Goel. 2022. Understanding the Design Space of AI- Mediated Social Interaction in Online Learning: Challenges and Opportunities. Proc. ACM Hum.-Comput. Interact. 6, CSCW1, Article 130 (April 2022), 26 pages. https://doi.org/10.1145/3512977

Betsy DiSalvo, Dheeraj Bandaru, Qiaosi Wang, Hong Li, and Thomas Plötz. 2022. Reading the Room – Automated, Momentary Assessment of Student Engagement in the Classroom: Are We There Yet?. Proc. ACM Interact. Mob. Wearable Ubiquitous Technol. 6, 3, Article 112 (September 2022), 26 pages. https://doi.org/10.1145/3550328

Chia-Fang Chung, Qiaosi Wang, Jessica Schroeder, Allison Cole, Jasmine Zia, James Fogarty, and Sean A. Munson. 2019. Identifying and Planning for Individualized Change: Patient Provider Collaboration Using Lightweight Food Diaries in Healthy Eating and Irritable Bowel Syndrome. PACM Interact. Mob. Wearable Ubiquitous Technol. 3, 1, Article 7 (March 2019), 23 pages. https://doi.org/10.1145/3314394

Invited Book Chapter

Qiaosi Wang, Ida Camacho, Ashok K. Goel. 2022. Investigating the Potential of AI-based Social Matching Systems to Facilitate Social Interaction Among Online Learner. Social and Emotional Learning and Complex Skills Assessment. Springer, Cham, 2022. Page 279-298.

Referred Conference Proceedings

Qiaosi Wang, Michael Madaio, Shaun Kane, Shivani Kapania, Michael Terry, Lauren Wilcox. 2023. Designing Responsible AI: Adaptations of UX Practice to Meet Responsible AI Challenges. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI' 23). ACM, Hamburg, Germany. https://doi.org/10.1145/3544548.3581278 (Acceptance rate: 28.39%)
One of the five papers selected as CHI'2023 Editor's Choice on Human-Centered AI

Qiaosi Wang, Shan Jing, Ashok K. Goel. 2022. Co-Designing AI Agents to Support Social Connectedness Among Online Learners: Functionalities, Social Characteristics, and Ethical Challenges. In Designing Interactive Systems Conference (DIS'22). ACM, Virtual Event, USA. https://doi.org/10.1145/3532106.3533534 (Acceptance rate: 21.5%)

Qiaosi Wang, Koustuv Saha, Eric Gregori, David A. Joyner, and Ashok K. Goel. 2021. Towards Mutual Theory of Mind in Human-AI Interaction: How Language Reflects What Students Perceive About a Virtual Teaching Assistant. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21). ACM, Virtual Event, USA. https://doi.org/10.1145/3411764.3445645 (Acceptance rate: 26.3%)

Qiaosi Wang, Shan Jing, David A. Joyner, Lauren Wilcox, Hong Li, Thomas Plötz, Betsy DiSalvo. 2020. Sensing Affect to Empower Students: Learner Perspectives on Affect-Sensitive Technology in Large Educational Contexts. In Proceedings of the ACM Conference on Learning at Scale 2020 (L@S '20). ACM, Virtual Event, USA. http://dx.doi.org/10.1145/10.1145/3386527.3405917 (Acceptance rate: 25%)
Best Student Paper Award

David A. Joyner, Qiaosi Wang, Suyash Thakare, Shan Jing, Ashok K. Goel, Blair MacIntyre. 2020. The Synchronicity Paradox in Online Education. In Proceedings of the ACM Conferences on Learning at Scale 2020 (L@S '20). ACM, Virtual Event, USA. https://doi.org/10.1145/3386527.3405922 (Acceptance rate: 25%)

Lauren Wilcox, Betsy DiSalvo, Dick Henneman, Qiaosi Wang. 2019. Design in the HCI Classroom: Setting a Research Agenda. In Designing Interactive Systems Conference (DIS'19). ACM, San Diego, CA, USA. https://doi.org/10.1145/3322276.3322381 (Acceptance rate: 25%)
Best Paper Award

Abstracts & Extended Abstracts

Qiaosi Wang, Sarah E. Walsh, Mei Si, Jeffrey O. Kephart, Justin D. Weisz, Ashok K. Goel. 2024. Theory of Mind in Human-AI Interaction. Workshop proposal accepted at the 2024 CHI Conference on Human Factors in Computing Systems (CHI EA'24). ACM, Honolulu, HI, USA. (Acceptance rate: 49%)

Qiaosi Wang, Shan Jing, Ida Camacho, Ashok K. Goel. 2020. Jill Watson SA: Design and Evaluation of a Virtual Agent to Build Communities Among Online Learners. In Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI EA'20). ACM, Honolulu, HI, USA. http://dx.doi.org/10.1145/3334480.3382878. (Acceptance rate: 41.8%)

Workshop Papers

Qiaosi Wang, Ashok K. Goel. 2022. Mutual Theory of Mind for Human-AI Communication. Presented at CHAI@IJCAI: Communications in Human-AI Interaction Workshop at the 2022 International Joint Conferences on Artificial Intelligence (IJCAI). https://arxiv.org/pdf/2210.03842.pdf

Qiaosi Wang, Ida Camacho, Ashok K. Goel. 2020. Designing for Agent-Mediated Online Social Connections: Lessons Learned and Potential Challenges. Presented at CUI@CSCW: Collaborating Through Conversational User Interfaces Workshop at the 2020 ACM Computer-Supported Cooperative Work and Social Computing (CSCW) Virtual Conference.

RESEARCH EXPERIENCE

Aug 2018 Present

Graduate Research Assistant. School of Interactive Computing, Georgia Tech.

Advised by Dr. Ashok Goel as a PhD student in Human-Centered Computing. In my Ph.D. research, I take a cognitive science perspective to understand how we can design, explore, and critically examine the interactions and relationships between humans and AI with increasingly human-like social intelligence (e.g., "Theory of Mind" or commonly known as "mind-reading" capability). I leverage both qualitative and quantitative methods in my research. The methods I commonly use are semi-structured interviews, survey, co-design, statistical modeling, experiment design, inferential and descriptive statistics, etc.

May 2022 Aug 2022

Research Intern. Google Research, People+AI Research (PAIR) team.

Mentors: Dr. Lauren Wilcox and Dr. Michael Terry
Conducted semi-structured interviews with 15 UX practitioners and 8 Responsible AI Experts to understand how current industry UX practices are adapting to meet responsible AI challenges, especially in the context of large language models and generative AI. This work was published as a full paper at CHI'2023 and was selected as one of the five papers as CHI 2023 Editors' Choice in Human-Centered AI.

May 2021 – Aug 2021 | **Research Intern. IBM Research, Almaden Lab.**
Mentors: Eric Liu, Dr. Robert Moore, and Dr. Guang-Jie Ren
Led and conducted qualitative studies to opportunities in augmenting B2B practices. Findings from my internship project has influenced the team's direction in building and designing human-centered AI technologies in B2B context.

Jun 2017 – Dec 2017 | **Undergraduate Research Assistant. HCDE, University of Washington.**
Advised by Dr. Sean Munson and Dr. Julie Kientz. I worked on two HCI projects examining the patient-provider collaboration among patients with Irritable Bower Syndrome (IBS) and designing user value scale in computing technologies. In both projects, I assisted the lead Ph.D. student in conducting user interviews and surveys, and efforts in paper-writing.

TEACHING EXPERIENCE

Spring 2022 | **Graduate Teaching Assistant, Georgia Institute of Technology**
OMSCS - CS6795 Introduction to Cognitive Science (Dr. Ashok Goel)
Overall effectiveness: 4.9/5.0

Spring 2021 | **Online Course Development Teaching Assistant, Georgia Institute of Technology**
OMSCS - CS6795 Introduction to Cognitive Science (Dr. Ashok Goel)

Summer 2020 | **Graduate Teaching Assistant, Georgia Institute of Technology**
CS6795 Introduction to Cognitive Science (Dr. Michael Helms)
Overall effectiveness: 4.8/5.0

Summer 2019 | **Graduate Teaching Assistant, Georgia Institute of Technology**
CS6795 Introduction to Cognitive Science (Dr. Ashok Goel)
Overall effectiveness: 4.8/5.0

COMMUNITY SERVICES

Peer-review | **Conferences:** CHI (2019, 2020, 2021, 2022, 2023***, 2024*), CSCW (2021*, 2022, 2023), DIS (2019, 2022), CogSci (2020) **Recognition for Outstanding Review*

Journals: ACM Transactions on Interactive Intelligent Systems (TiiS), International Journal of Human-Computer Studies (IJCHS), IEEE Pervasive Computing

Volunteer | **Student volunteer**: DIS 2019, CSCW 2020 (virtual), CHI 2021 (virtual)

Georgia Tech | **Facilitator for HCC Program PhD Seminar**, Fall 2020
Lab Manager, Design & Intelligence Lab

UW | **Undergraduate Research Leader**, Undergraduate Research Program
Event Coordinator, UW Psi Chi Honor Society
Student Mentor, International Student Mentorship Program
Facilitator, Foundation of International Understanding Through Students (FIUTS)

INVITED TALKS AND PANELS

June 2023 ¦ Mental Models in Human-AI Interaction
Organizer and Presenter, Online Symposium, Collaboration with researchers from Georgia Tech, RPI, IBM Research

March 2023 ¦ Designing Responsible AI: Adaptations of UX Practice to Meet Responsible AI Challenges
Invited guest lecture at University of California, Berkeley

Nov 2022 ¦ Mutual Theory of Mind for Human-AI Communication
Invited talk at University of Manchester

April 2022 ¦ Mutual Theory of Mind for Human-AI Communication
Presenter, GVU Foley Scholar Award Winners Brown Bag Talk, Georgia Tech

July 2021 ¦ How Will AI Transform Teaching and Learning?
Panelist, The Chronicle of Higher Education

SKILLS

Design ¦ prototyping, wireframing, sketching, storyboarding, participatory design

Research ¦ interview, survey, affinity diagram, open coding, reflexive thematic analysis, contextual inquiry, observational study, usability testing, statistical analysis (inferential and descriptive), hypothesis testing, experiment design, statistic modeling.

Programming ¦ Java, Python, R, HTML, CSS, JavaScript, Swift, SQL

Tools ¦ Adobe Illustrator, Adobe XD, Adobe Lightroom, Figma, InVision, SPSS, RStudio, Qualtrics, SurveyGizmo

PRESS COVERAGE

June 2022 ¦ Ethno-Data Blog. Conversing with AI: Interview with Chelsea Wang about Communications with Artificial Intelligence Systems. [Link]

June 2021 ¦ EdTech Higher Education Magazine. *Q&A: Georgia Tech Researcher Discusses How AI can Improve Student Success.* [Link]

May 2021 ¦ Georgia Tech News. *New Language Model Uses Texts to Predict How Groups of People Perceive AI Agents.* [Link]