Hui-Ru (Irene) Ho

PhD Student · Computer Sciences Program

University of Wisconsin-Madison, 1210 W Dayton St, Madison, WI 53726

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Education

University of Wisconsin–Madison	*Madison Wisconsin*
PhD Computer Sciences	*2024 - present*

- Advisor: Dr. Bilge Mutlu
- GPA: 3.9/4.0

University of Wisconsin–Madison	*Madison Wisconsin*
MS Computer Sciences	*2021 - 2023*

- Advisor: Dr. Bilge Mutlu

University of Wisconsin–Madison	*Madison Wisconsin*
MS Educational Psychology	*2019 - 2023*

- Advisor: Dr. Edward Hubbard

National Taiwan University	*Taipei, Taiwan*
BS Psychology (minor in Economics)	*2014 - 2019*

Publications

Published

Ho, H. R., Hubbard, E. M., Mutlu, B. (2024, May). "It's Not a Replacement:'" Enabling Parent-Robot Collaboration to Support In-Home Learning Experiences of Young Children. Proceedings of the 2024 CHI conference on human factors in computing systems. **Honorable Mention Award (Top 150 in 4028)**

Ho, H. R., White, N. T., Hubbard, E. M., Mutlu, B. (2023, June). Designing Parent-child-robot Interactions to Facilitate In-Home Parental Math Talk with Young Children. In Proceedings of the 22nd Annual ACM Interaction Design and Children Conference (pp. 355-366).

Ho, H. -R., Cagiltay, B., White, N., Hubbard, E., Mutlu, B. (2021, June 24-30). RoboMath: Designing a Learning Companion Robot to Support Children's Numerical Skills. ACM Interaction Design and Children (IDC) Conference, Athens, Greece.

Cagiltay, B., **Ho, H. -R.**, Michaelis, J., Mutlu, B. (2020, June 21-24). Investigating Family Perceptions and Design Preferences for an In Home Robot. ACM Interaction Design and Children (IDC) Conference, London, United Kingdom.

Ho, H. -R., Chen, Y. -L., Wu, A. -Y., Yeh, S. -L., Youngstrom, E. A. (2017, August). Do people with different personalities show different emotion patterns? Poster presented at the American Psychological Association (APA) Annual Convention, San Francisco, CA, United States.

In Review

Ho, H. R., Cagiltay, B., Ibtasar, R., Mutlu, B., Michaelis, J. E. (2025). Exploring How Learning Companion Robots Can Assist Children in Homework. [venue removed for anonymization concerns]

Ho, H. R., Kargeti, N., Liu, Z., Mutlu, B. (2025). SET-PAiREd: Designing for Parental Involvement in Learning with an AI-Assisted Educational Robot. [venue removed for anonymization concerns]

Research Experience

Graduate Researcher	*Madison, WI*
People and Robotics Lab, UW-Madison	*09/2019 - Present*

- Designing learning companion robot to support children's learning through human-AI collaboration.

Graduate Researcher   *Madison, WI*
Educational Neuroscience Lab, UW–Madison   *2019-2023*
- Investigated how attention and multisensory perception affect working memory and numerical cognition.

User Experience Researcher Intern – AI Platform Team   *Menlo Park, CA*
Meta Platforms, Inc.   *Summer 2022*
- Led mixed-methods studies collaborating with AI/ML engineers and support AI productivity through quantitative methods.

User Experience Researcher Intern – Consumer Team   *Taipei, Taiwan*
Trend Micro Taiwan   *Summer 2017*
- Led mixed-methods research to develop privacy-sensitive products and evaluated in-home parental control device.

Mentoring Experience

2024-now	**Yash Sancheti**, Undergraduate Assistant	*Madison, WI*
2023-now	**Ziqi Liu**, Undergraduate Assistant with Honors	*Madison, WI*
2023-now	**Justina Wang**, Undergraduate Assistant with Honors	*Madison, WI*
2023-now	**Nitigya Kargeti**, Graduate Assistant	*Madison, WI*
2022-2024	**Muhammad Junaid**, Graduate Assistant	*Madison, WI*

Teaching Experience

2022 - 2024	**EP 301 How People Learn**, Teaching Assistant	*UW-Madison*
2020 - 2022	**EP 326 Mind, Brain and Education**, Teaching Assistant	*UW-Madison*

Awards, Fellowships, & Grants

June 2023	**Graduate Student Travel Award**, University of Wisconsin-Madison	*$500*
June 2023	**Student Research Grants Competition**, University of Wisconsin-Madison	*$1500*
May 2022	**Government Scholarship to Study Abroad (GSSA)**, Ministry of Education, Taiwan (R.O.C.)	*$32,000*
July 2018	**Fully-Funded Scholarship: Study Abroad Program for Future Scholars in the Humanities and Social Sciences**, Ministry of Education, Taiwan (R.O.C.)	*$30,000*

Professional Development

Director of Communications   *Madison, WI*
WiSolve Consulting Group, Inc   *2021-present*
- Managed internal and external communications with members and community stakeholders.

Instructor   *Madison, WI*
Grandparent University   *July 2024*
- Taught grandparents and grandchildren how to program social robots.

Attendee   *Madison, WI*
Morgridge Entrepreneurial Bootcamp   *Summer 2022*
- Educated with project management, business/lean startup canvas lecture and entrepreneurship.

Service and Outreach

May 2024	**ACM CHI 2024**, Student Volunteer	*Honolulu, HI*
June 2023	**ACM IDC 2023**, Student Volunteer	*Chicago, IL*

Peer Review

ACM/SIG Conferences: CHI, HRI, IDC