IRENE YE YUAN

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EDUCATION

Aug. 2017 – Aug. 2022	**Ph.D. in Computer Science (HCI)**, Department of Computer Science and Engineering **University of Minnesota**, Minneapolis, MN, U.S. Committee: Svetlana "Lana" Yarosh, Evan Suma Rosenberg, Loren Terveen, Scott McConnell
Aug. 2017 - May 2020	**M.Sc. in Computer Science,** Department of Computer Science and Engineering **University of Minnesota**, Minneapolis, MN, U.S.
Sept. 2014 – Aug. 2015	**Master of Human Computer Interaction + Design** **University of Washington**, Seattle, WA, U.S.
Sept. 2010 – May 2014	**B.A. in Computer Science, Mathematics and Physics** **St. Olaf College**, Northfield, MN, U.S.

PROFESSIONAL EXPERIENCE

Jul. 2023 – Current (full-time)	**Assistant Professor**, McMaster University, Hamilton, ON, Canada Tenure-track assistant professor in Department of Computing and Software, Faculty of Engineering.
Aug. 2022 – Jul. 2023 (full-time)	**Postdoctoral Fellow**, Connections Lab, Simon Fraser Univeristy, Surrey, B.C., Canada Designed and conducted *mixed methods* studies to understand technology design requirements for social collaborative activities; Mentored graduate students in their research, design, and writing.
Aug. 2017 – Aug. 2022	**Graduate Research Assistant**, GroupLens Lab, University of Minnesota, Minneapolis, MN, U.S. Utilized both qualitative and quantitative methods to understand how people use current technologies and opportunities for technologies to better support their activities; Design, develop and evaluate new technologies; Communicate study findings in both written reports and oral presentations.
June 2021 – Aug. 2021 (full-time)	**Research Intern**, EPIC Research Group, Microsoft Research, Redmond, WA, U.S. Collaborated with other researchers on developing new technology design frameworks to improve people's multi-device usage and workflow.
Nov. 2016 – Jul. 2017 (full-time)	**User Experience Specialist III**, LexisNexis, Shanghai, China Lead designer for cross-platform legal products from user research, ideation, design, prototype, testing to release; Collaborated closely with product and engineering teams from different locations throughout the product cycle and facilitated the communications between teams.
Sept. 2015 – June 2016 (full-time)	**Interaction Designer**, IA Collaborative, Chicago, IL, U.S. Collaborated with design researchers and visual designers to create omni-channel solutions and designed user experiences based on user needs and business requirements; Helped interaction design team utilize new prototyping tools by creating tutorials and teaching the team development knowledge.
May 2013 – May 2014	**Undergraduate Research Assistant**, MSCS Department, St. Olaf College, Northfield, MN, U.S. Implemented bundle adjustment algorithm for error minimization in 3D reconstruction process; Conducted series of interviews, heuristic evaluations on web apps developed for professors and students on campus and implemented the design changes based on evaluation results.

TEACHING EXPERIENCE

Sept. 2021 – May 2022 (full-time) **Visiting Instructor**, MSCS Department, Macalester College, U.S.
COMP 128 Data Structures

Spring, 2021 **Graduate Instructor**, Department of Computer Science and Engineering, University of Minnesota, U.S.
CSCI 1133 Introduction to Computing and Programming Concepts

Spring, 2018 **Teaching Assistant**, Department of Computer Science and Engineering, University of Minnesota, U.S.
CSCI 4041 Algorithms & Data Structures

2012 - 2013 **Teaching Assistant,** MSCS Department and Physics Department, St. Olaf College, U.S.
CSCI 333 Theory of Computation
PHYS 124 Principles of Physics I Lab, PHYS 125 Principles of Physics II Lab

2012 - 2013 **Academic Assistant,** Academic Support Center, St. Olaf College, U.S.
Physics and Mathematics

PUBLICATIONS

Refereed Journal Articles

[J.2] Jones, J., **Yuan, Y.,** and Yarosh, S. 2022. "Be Consistent, Work the Program, Be Present Every Day: Exploring Technologies for Self-Tracking in Early Recovery". *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.* 5, 4, Article 164 (Dec 2021), https://doi.org/10.1145/3494955.
Distinguished Paper Award

[J.1] **Yuan, Y.**, Thompson, S., Watson, K., Chase, A., Senthilkumar, A., Brush, A.J.B. Yarosh, S., 2019. "Speech interface reformulations and voice assistant personification preferences of children and parents." *International Journal of Child-Computer Interaction.* https://doi.org/10.1016/j.ijcci.2019.04.005.

Refereed Conference Proceedings

[C.9] Han, D., Geiskkovitch, D. Y., **Yuan, Y.,** Mills, C., Zhong C., Chen, A. Y. S., Stuerzlinger, W., and Neustaedter C. 2023. "Dr.'s Eye: The Design and Evaluation of a Video Conferencing System to Support Doctor Appointments in Home Settings." In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (CHI '23). ACM. https://doi.org/10.1145/3544548.3581350
[28% acceptance rate]

[C.8] Jin Q., **Yuan, Y.,** and Yarosh S. 2023. "Socio-technical Opportunities in Long-Distance Communication Between Siblings with a Large Age Difference." In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (CHI '23). ACM. https://doi.org/10.1145/3544548.3580720
Honorable Mention Award [top 5% of total submissions, 28% acceptance rate]

[C.7] **Yuan, Y.,** Riche, N., Marquardt, N., Nicholas, M. J., Seyed, T., Romat, H., Lee, B., Pahud, M., Goldstein, J., Vishkaie, R., Holz, C., and Hinckley, K. 2022. "Understanding Multi-Device Usage Patterns: Physical Device Confgurations and Fragmented Workfows." In *Proceeding of the 2022 CHI Conference on Human Factors in Computing Systems* (CHI '22). ACM. https://doi.org/10.1145/3491102.3517702.
[25% acceptance rate]

[C.6] **Yuan, Y.,** Cao, J., Wang, R., and Yarosh, S. "Tabletop Games in the Age of Remote Collaboration: Design Opportunities for a Socially Connected Game Experience." In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (CHI '21). ACM, 436:1–436:14, https://doi.org/10.1145/3411764.3445512.
Honorable Mention Award [top 5% of total submissions, 26% acceptance rate]

[C.5] Yu, B., **Yuan, Y.**, Terveen, L., Wu, Z., Forlizzi, J., and Zhu, H. 2020. "Keeping Designers in the Loop: Communicating Inherent Algorithmic Trade-offs Across Multiple Objectives". In *Proceedings of the 2020 ACM Designing Interactive Systems Conference* (DIS '20). ACM, 1245–1257. https://doi.org/10.1145/3357236.3395528.
[24% acceptance rate]

[C.4] Kawas, S., **Yuan, Y.**, DeWitt, A., Jin, Q., Kirchner, S., Bilger, A., Grantham, E., Kientz, J.A., Tartaro, A., & Yarosh, S. 2020. "Another decade of IDC research: examining and reflecting on values and ethics". In *Proceedings of the Interaction Design and Children Conference* (IDC '20). ACM, 205–215. https://doi.org/10.1145/3392063.3394436.
[30% acceptance rate]

[C.3] McRoberts, S., **Yuan, Y.**, Watson, K., & Yarosh, S. "Behind the Scenes: Design, Collaboration, and Video Creation with Youth." In *Proceedings of the 18th ACM Conference on Interaction Design and Children* (IDC '19). ACM, 173-184, https://doi.org/10.1145/3311927.3323134.
[33% acceptance rate]

[C.2] **Yuan, Y.**, and Yarosh, S. 2019. "Beyond Tutoring: Opportunities for Intergenerational Mentorship at a Community Level." In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems* (CHI '19). ACM, 449:1–449:14, https://doi.org/10.1145/3290605.3300679.
Honorable Mention Award [top 5% of total submissions, 24% acceptance rate]

[C.1] Yarosh, S., Thompson, S., Watson, K., Chase, A., Senthilkumar, A., **Yuan, Y.**, Brush, A.J.B. 2018. "Children Asking Questions: Speech Interface Reformulations and Personification Preferences." In *Proceedings of the 17th ACM Conference on Interaction Design and Children* (IDC '18). ACM, 300-312, https://doi.org/10.1145/3202185.3202207.
Best Paper Award [top 1% of total submissions, 31% acceptance rate]

Short Papers and Posters

[P.2] Jin, Q., Liu, Y., **Yuan, Y.**, Yarosh, S., & Suma Rosenberg, E. 2020. "VWorld: an Immersive VR System for Learning Programming." In Proceedings of the Interaction Design and Children (IDC '20). ACM. https://doi.org/10.1145/3397617.3397843.

[P.1] Butzer, M., Levonian, Z., Luo, Y., Watson, K., **Yuan, Y.**, Smith, C. E.,& Yarosh, S. 2020. "Grandtotem: Supporting International and Intergenerational Relationships." In *Conference Companion Publication of the 2020 on Computer Supported Cooperative Work and Social Computing* (CSCW '20). ACM, 227–231. https://doi.org/10.1145/3406865.3418307

Other Publications

[O.1] Knowles, B., Hanson, V. L., Rogers, Y., Piper, A. M., Waycott, J., Davies, N., Ambe, A. H., Brewer, R. N., Chattopadhyay D., Dee, M., Frohlich D., Gutierrez-Lopez M., Jelen, B., Lazar A., Nielek R., Pena, B. B., Roper A., Schlager M., Schulte B., & **Yuan, I. Y.** 2021. The harm in conflating aging with accessibility. Commun. ACM 64, 7 (July 2021), 66–71. https://doi.org/10.1145/3431280

PROFESSIONAL & COMMUNITY SERVICE

2018 - Current **Reviewer for ACM CHI, CSCW, IDC, IMWUT Conferences**
Have reviewed over 20 paper submissions and 8 extended abstract submissions

2021 - Current **Reviewer for International Journal of Child-Computer Interaction**
Have reviewed 2 paper submissions

2021 **Reviewer for Human Behavior and Emerging Technologies**
Have reviewed 1 paper submission

2015, 2020, 2022 **Student Volunteer**
ACM CHI 2015, IDC 2020, MobileHCI 2022

Nov. 2017 – May 2018 **Graduate Mentor**
WISE Undergraduate-Graduate Mentor Program, University of Minnesota

PROFESSIONAL SKILLS

Programming Languages
C/C++, C#, HTML&CSS, Java, JavaScript, Matlab, Python, R, SQL

Platforms and Tools
Research & Analysis Jupyter notebook, MySQL, Pandas, Qualtrics, RStudio, SPSS, Excel, Tableau, Genism
Design Adobe Creative Suite (Photoshop, Illustrator, Premiere, etc.), Axure, Figma, Framer, Sketch
Prototyping Android Studio, Arduino, D3.js, Processing / p5.js, React, Unity

Research & Design
User Research A/B Testing, Benchmarking, Contextual Inquiry, Experiment Design, Focus Group, Interview, Observation, Participatory Design, Survey, Usability Testing
Design Prototyping (Low-High Fidelity), Persona, Storyboarding, Wireframing