IRENE YE YUAN

EDUCATION

May 2013 - May 2014

Aug. 2017 – Aug. 2022 Ph.D. Candidate in Computer Science (HCI), Department of Computer Science and Engineering University of Minnesota, Minneapolis, MN M.Sc. in Computer Science, Department of Computer Science and Engineering Aug. 2017 - May 2020 University of Minnesota, Minneapolis, MN Master of Human Computer Interaction + Design Sept. 2014 - Aug. 2015 University of Washington, Seattle, WA Sept. 2010 – May 2014 B.A. in Computer Science, Mathematics and Physics St. Olaf College, Northfield, MN PROFESSIONAL EXPERIENCE Aug. 2017 – Aug. 2022 Graduate Research Assistant, GroupLens Lab, University of Minnesota, Minneapolis, MN Utilize both qualitative (e.g., interview, participatory design) and quantitative (e.g., survey, experiment, log analysis) 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. Sept. 2021 - May 2022 Visiting Instructor, MSCS Department, Macalester College, St. Paul, MN Design and teach introductory level computer science courses; Conduct research in Human-Computer Interaction and Computer Supported Cooperative Work and mentor students in undergraduate research. June 2021 – Aug. 2021 Research Intern, EPIC Research Group, Microsoft Research, Redmond, WA Collaborate with other researchers on developing new technology and interaction techniques to improve people's workflow and technology use. Nov. 2016 – Jul. 2017 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. Jul. 2016 – Sept. 2016 Freelance Web Designer & Developer, Seattle, WA Collaborated with visual designer to redesign clients' websites experiences, with a focus on information architecture and UX design; Implemented the website re-design, complete the websites setup and maintain the websites; Conducted usability testing on the design. Sept. 2015 – June 2016 Interaction Designer, IA Collaborative, Chicago, IL 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.

campus and implemented the design changes based on evaluation results.

Undergraduate Research Assistant, MSCS Department, St. Olaf College, Northfield, MN 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

PUBLICATIONS

Refereed Journal Articles

[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 Full Papers

- [C.8] **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 Configurations 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.
- [C.7] 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.
- [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**
- [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.
- [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.
- [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.
- [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**
- [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

Non-Refereed Papers & 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

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

TEACHING EXPERIENCE

Spring, 2021 **Graduate Instructor**, Department of Computer Science and Engineering, University of Minnesota

Introduction to Computing and Programming Concepts

Spring, 2018 **Teaching Assistant**, Department of Computer Science and Engineering, University of Minnesota

Algorithm & Data Structure

2012 - 2013 **Teaching Assistant,** MSCS Department and Physics Department, St. Olaf College

Principles of Physics I Lab, Principles of Physics II Lab, Theory of Computation

2012 - 2013 Academic Assistant, Academic Support Center, St. Olaf College

Physics and Mathematics

PROFESSIONAL & COMMUNITY SERVICE

2018 - Current Reviewer for ACM CHI, CSCW, IDC, IMWUT Conferences

Have reviewed over 15 paper submissions and 8 extended abstract submissions

2021 - Current Reviewer for International Journal of Child-Computer Interaction

Have reviewed 2 paper submission

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