

EDUCATION

- Aug. 2017 – Present **Ph.D. in Computer Science (HCI)**, Department of Computer Science and Engineering
University of Minnesota, Minneapolis, MN
Advisor: Lana Yarosh
- Sept. 2014 – Aug. 2015 **Master of Human Computer Interaction + Design**
University of Washington, Seattle, WA
- Sept. 2010 – May 2014 **B.A. in Computer Science, Mathematics and Physics**
St. Olaf College, Northfield, MN

RESEARCH INTERESTS

Human-Computer Interaction, Human-centered AI, Computer-Supported Cooperative Work, Conversational Agents, Data Visualization

SELECTED PUBLICATIONS

- Refereed Journal Articles **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 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>.
- 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>.
- 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>.
- 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**
- 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**

PROFESSIONAL SKILLS

Programming Languages

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

Programming Frameworks

Machine Learning Pandas, scikit-learn, SciPy, Gensim
Web & Visualization D3.js, Processing / p5.js, Flask, React, Node.js

Platforms and Tools

Programming Jupyter notebook, Android Studio, Arduino, MySQL, Unity
Design Adobe Creative Suite, Axure, Figma, Framer, Sketch

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

PROFESSIONAL EXPERIENCE

Aug. 2017 – Present **Graduate Researcher**, GroupLens Lab, University of Minnesota, Minneapolis, MN

Utilize both qualitative and quantitative 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. Some previous research projects included:

- Employed a user-centered design approach to design and develop an interactive visualization tool for helping designers and non-expert stakeholders understand trade-offs in machine learning models; Evaluated the tool via online experiment and expert interview to understand the outcomes;
- Conducted an experiment to understand children's reformulation strategies when interacting with different designs of conversational agents, and understand design opportunities for conversational agents to better support families' needs;
- Conducted a field study with different stakeholders to understand the current practices of a community mentorship program, and translated research findings into design directives for new system design and development.

Nov. 2016 – Jul. 2017 **User Experience Specialist III**, LexisNexis, Shanghai, China

Lead designer for cross-platform legal products from user research, ideation, design, 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 **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

PROFESSIONAL & COMMUNITY SERVICE

2018 - Current **ACM CHI, CSCW, IDC Conference Reviewer**
Student Volunteer, ACM IDC 2020, ACM CHI 2015