

LISA ORII

Research in User-Centered Digital Health and AI

Computer science Ph.D. candidate with training in global health and 7+ years of experience leading end-to-end user research. Skilled in qualitative and quantitative research methods, designing and executing interviews, co-design, surveys, and usability testing. Enthusiastic collaborator, working with designers, software engineers, and subject matter experts to translate user insights into actionable design recommendations and guide iterative development and testing of technologies in real-world contexts. Published multiple peer-reviewed papers and presented research at top-tier Human-Computer Interaction conferences.

Education

University of Washington

Sep 2021 – Jun 2026 (Expected)

Ph.D. in Computer Science & Engineering

Graduate Certificate in Global Health of Women, Adolescents, and Children

GPA: 3.98/4.00

Wellesley College

Sep 2017 – Jun 2021

B.A. in Computer Science and Philosophy

GPA: 3.88/4.00

Experience

Graduate Research Assistant | University of Washington | Seattle, WA, USA

Sep 2021 – Present

Managed projects with early generative and evaluative user experience research on mobile health across sub-Saharan Africa to deliver data driven recommendations for product design, data policy, and AI integration.

- Led interviews and focus groups with 75+ patients and staff at Malawi's HIV care program, analyzing user research data to present design recommendations for secure mobile data management and regulatory requirements to program leadership.
- Managed ideation, development, deployment of a health decision-support Android mobile app in Kenya with designers, software engineers, and health experts, translating user needs from co-design and usability testing with 40+ patients and providers into UX improvements for 100+ pilot sessions.
- Led concept testing of chatbot prototypes with 45+ patients and providers in Kenya, conducting qualitative analysis to derive design guidelines for chatbot-supported decision-making and validation of technical feasibility by building and testing a chatbot.

Research Intern | OMRON SINIC X Corporation | Tokyo, Japan

Jun 2025 – Sept 2025

Led user research project on AI in peer support communication through a user study and LLM-based system prototyping.

- Designed and ran a 60-participant mixed-methods study combining experiments, surveys, and interviews to analyze user experiences with an LLM-powered system that enabled AI-mediated interaction.

Intern | PATH | Seattle, WA, USA

Apr 2024 - Sep 2024

Identified data requirements to strengthen digital health data systems for integrated newborn nutrition in low-resource settings.

- Defined 350+ data requirements for human milk banking and blood banking by comparing business processes and analyzing existing data dictionaries.
- Conducted qualitative analysis of 100+ subject-matter expert comments using thematic coding to identify workflow inefficiencies and recommend process optimizations for system design.
- Delivered a storytelling-driven report visualizing personas, journeys, and workflows to communicate key use cases and influence system design decisions among project management leaders.

Research Intern | The University of Tokyo | Tokyo, Japan

Apr 2020 – May 2022

Led user research of speech manipulation technologies, deriving design guidelines for speech practice systems.

- Designed and ran an 18-participant mixed-methods study combining experiments, surveys, and interviews to analyze user experiences with a speech manipulation tool, synthesizing findings into 3 UX design guidelines for speech practice systems.

Undergraduate Researcher | MIT Media Lab | Cambridge, MA, USA

Feb 2019 – Aug 2019

Managed user research-driven design and deployment of an environmental monitoring system, translating user feedback into product refinement and field launch in Benin.

- Iteratively engineered a low-cost, water-quality sensor kit with Arduino, achieving battery life improvements from 3 hours to 2 weeks through targeted hardware refinements.
- Integrated wireless data transmission into the sensor kit in response to user needs, enabling real-time monitoring and greater usability for field operations.

Skills

Languages: English (native), Japanese (native)

Technical & Tools: Python, R, Flutter, Java, HTML/CSS/JavaScript, ATLAS.ti, Figma, Tableau, Miro, Mural, Microsoft Office

Research Methods: Usability testing, prototyping, co-design, contextual inquiry, journey mapping, ethnography, interviews, focus groups, field research, concept testing, experiments, surveys, content analysis, statistical analysis, log analysis, task analysis

Peer-Reviewed Publications

1. **Lisa Orii**, Elizabeth K. Harrington, Serah Gitome, Nelson Kiprotich Cheruiyot, Elizabeth Anne Bukusi, Sandy Cheng, Ariel Fu, Khushi Khandelwal, Shrimayee Narasimhan, and Richard Anderson. Supporting Contraceptive Decision-Making in the Intermediated Pharmacy Setting in Kenya. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*. <https://dl.acm.org/doi/10.1145/3706598.3713508>
2. **Lisa Orii**, Caryl Feldacker, Jacqueline Madalitso Huwa, Agness Thawani, Evelyn Viola, Christine Kiruthu-Kamamia, Odala Sande, Hannock Tweya, and Richard Anderson. HIV Client Perspectives on Digital Health in Malawi In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*. **Best Paper Honorable Mention (top 5% of accepted papers)**. <https://dl.acm.org/doi/full/10.1145/3613904.3642245>
3. **Lisa Orii**, Kate S. Wilson, Jacqueline Huwa, Christine Kiruthu-Kamamia, Odala Sande, Agness Thawani, Astrid Berner-Rodoreda, Evelyn Viola, Hannock Tweya, Petros Tembo, Wapu Masambuka, Richard Anderson, and Caryl Feldacker. "They gave us the right to choose." A qualitative study of preferences for differentiated service delivery location among recipients of antiretroviral therapy at Lighthouse Trust in Lilongwe Malawi. 2024. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0296531>
4. **Lisa Orii**, Caryl Feldacker, Hannock Tweya, Richard Anderson. eHealth Data Security and Privacy: Perspectives from Diverse Stakeholders in Malawi. In *Proceedings of the ACM on Human-Computer Interaction*. <https://dl.acm.org/doi/10.1145/3637323>
5. Shaan Chopra, **Lisa Orii**, Katherine Juarez, Nussara Tieanklin, James Fogarty, and Sean A. Munson. 2024. Menopause Legacies: Designing to Record and Share Experiences of Menopause Across Generations. In *Proceedings of the ACM on Human-Computer Interaction*. <https://dl.acm.org/doi/10.1145/3686975>
6. **Lisa Orii**, Nami Ogawa, Yuji Hatada, and Takuji Narumi. 2022. Designing for Speech Practice Systems: How Do User-Controlled Voice Manipulation and Model Speakers Impact Self-Perceptions of Voice? In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*. <https://doi.org/10.1145/3491102.3502093>
7. **Lisa Orii**, Diana Tosca, Andrew L Kun, and Orit Shaer. 2021. Perceptions of Trucking Automation: Insights from the r/Truckers Community. In *13th International Conference on Automotive User Interfaces and Interactive Vehicular Applications*. <https://doi.org/10.1145/3409118.3475154>
8. **Lisa Orii**, Diana Tosca, Andrew L Kun, and Orit Shaer. 2021. Perceptions on the Future of Automation in r/Truckers. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing*. <https://doi.org/10.1145/3411763.3451637>
9. **Lisa Orii**, Luis Alonso, Kent Larson. 2020. Methodology for Establishing Well-Being Urban Indicators at the District Level to be Used on the CityScope Platform. In *Sustainability*. <https://doi.org/10.3390/su12229458>
10. Di Jin, Zhijing Jin, Joey Tianyi Zhou, **Lisa Orii**, and Peter Szolovits. Hooks in the Headline: Learning to Generate Headlines with Controlled Styles. In *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*. <https://doi.org/10.18653/v1/2020.acl-main.456>

Teaching

University of Washington

Data Programming, Introductory Python (Undergraduate)

Autumn 2025, Winter 2025

Computing for Social Good (Graduate)

Autumn 2024

Capstone Software Design for Global Health (Undergraduate)

Spring 2024

Human-Computer Interaction (Undergraduate)

Winter 2024

Wellesley College

Human-Computer Interaction (Undergraduate)

Spring 2021

Human-Automation Interaction (Undergraduate)

Spring 2021

Honors, Awards, and Fellowships

Japan Student Services Organization (JASSO) Graduate Scholarship

2025

ACM CHI 2024 Best Paper Honorable Mention (top 5%)

2024

Wellesley College Horton-Hallowell Fellowship

2025

Quad Fellowship

2022

MIT Technology Review's Innovators Under 35 Japan

2022

Funai Overseas Scholarship

2020

Grace Hopper Celebration 2020 Scholarship

2020

Japan Student Services Organization (JASSO) Undergraduate Scholarship

2017

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| Grew Bancroft Foundation Scholarship | 2017 |
| Kanazawa Iwao Memorial Foundation Scholarship | 2017 |

Grants

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| University of Washington Global Innovation Fund Tier 1 Research Award (\$5,000) | 2025 |
| University of Washington Global Innovation Fund Tier 1 Research Award (\$20,000) | 2023 |