

# 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

Planned and executed end-to-end research for digital health and digital financial service projects in sub-Saharan Africa, identifying user needs and informing product design to improve safety and adoption

- Led multi-stakeholder qualitative research on security for digital health data management in Malawi's HIV care program; presented policy and practice recommendations for managing mobile medical record systems to care program stakeholders.
- Directed end-to-end development of a contraceptive decision-support Android app from Figma designs within 5 months, collaborating with engineers, designers, and clinicians to facilitate and analyze co-design workshops with 40+ patients and providers in Kenya, defining and implementing user interface design improvements for 100+ pilot sessions.
- Designed and evaluated 3 Figma chatbot prototypes with 45+ patients and providers in Kenya using concept testing and identified use-related risks and design guidelines for conversational interfaces in sensitive medical contexts.
- Designed and analyzed a longitudinal quantitative study of 49,000 digital financial transactions to evaluate user reliability challenges in Nigeria, presenting findings to funding partners with data visualizations.
- Contributed to longitudinal qualitative study design for optimization testing of prototypes of a novel mobile app aiding clinicians in diagnosing reparatory illnesses for young children in Uganda.

### Intern | OMRON SINIC X Corporation | Tokyo, Japan

Jun 2025 – Sept 2025

Led mixed methods research of an LLM-based system used for online peer support communication.

- Designed and ran a 60-participant experiment, survey, and interviews to derive design guidelines for human-AI interaction.
- Built an LLM-powered system that generated context-aware communication recommendations in real-time.

### Intern | PATH | Seattle, WA, USA

Apr 2024 – Sep 2024

Supported the design of data systems for integrated newborn nutrition in low-resource settings, ensuring recommendations aligned with the WHO's SMART Guidelines.

- Defined 350+ data requirements for human milk banking and blood banking systems by comparing business processes.
- Analyzed 100+ expert comments using thematic coding to identify workflow gaps and recommend system design optimizations.
- Co-authored concept note and report with personas and user journeys to communicate use cases to organization leaders.

### Intern | The University of Tokyo | Tokyo, Japan

Apr 2020 – May 2022

Led mixed methods research of speech manipulation technologies, defining designs for user-controlled speech practice systems.

- Designed and ran an 18-person experiment, interviews, and surveys to assess user control, feedback timing, and perceived usability of speech manipulation technologies, translating insights into design guidelines for speech practice systems.

### Research Assistant | Wellesley College Human-Computer Interaction Lab | Wellesley, MA, USA

Sept 2020 – Sept 2021

Directed research exploring stakeholder attitudes and experiences with AI in the trucking industry.

- Led web scraping, qualitative analysis, and time-series modeling of 2,900+ social media posts to identify emerging trends.

### Research Assistant | MIT Media Lab | Cambridge, MA, USA

Feb 2019 – Aug 2019

Managed the deployment of a water monitoring system, translating user needs into product refinement and field launch in Benin.

- Engineered a low-cost Arduino-based water-quality sensor kit, extending battery life from 3 hours to 2 weeks with solar batteries.
- Integrated wireless data transmission, enabling real-time monitoring and improving 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

Grew Bancroft Foundation Scholarship	2017
Kanazawa Iwao Memorial Foundation Scholarship	2017

## Grants

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