

Lisa Orie

lisaorie@cs.washington.edu | 781.666.7120 | lisaorie.github.io

Research Interests

I develop and evaluate human-centered digital health applications that support healthcare provision in low- and middle-income countries (LMICs) and integrate into existing health systems. I apply frameworks and methods from the fields of Computer-Supported Cooperative Work (CSCW) and Human-Computer Interaction (HCI). My research is collaborative – I work closely with health experts and Ministries of Health who understand local contexts.

Education

University of Washington (UW)

Ph.D. in Computer Science & Engineering
Advisor: Prof. Richard Anderson

Sept 2021 – Aug 2026 (Expected)

Wellesley College

B.A. in Computer Science and Philosophy
Advisor: Prof. Orit Shaer
Magna Cum Laude, Phi Beta Kappa, Sigma Xi

Sept 2017 – June 2021

University of Oxford Worcester College

Visiting student in Computer Science and Philosophy

Sept 2019 – Dec 2019

Publications

Peer-Reviewed Publications

1. Shaan Chopra, **Lisa Orie**, Katherine Juarez, Nussara Tieanklin, James Fogarty, and Sean A. Munson. 2024. Menopause Legacies: Designing to Record and Share Experiences of Menopause Across Generations. To appear in Proc. ACM Hum.-Comput. Interact (CSCW '24). [\[link\]](#)
2. **Lisa Orie**, Caryl Feldacker, Jacqueline Madalitso Huwa, Agness Thawani, Evelyn Viola, Christine Kiruthu-Kamamia, Odala Sande, Hannock Tweya, and Richard Anderson. 2024. HIV Client Perspectives on Digital Health in Malawi. In *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24)*. **Best Paper Honorable Mention (top 5%)** [\[link\]](#)
3. **Lisa Orie**, Caryl Feldacker, Hannock Tweya, Richard Anderson. eHealth Data Security and Privacy: Perspectives from Diverse Stakeholders in Malawi. Proc. ACM Hum.-Comput. Interact (CSCW '24). [\[link\]](#)
4. **Lisa Orie**, 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 (CHI '22)*. [\[link\]](#)
5. **Lisa Orie**, 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 (AutomotiveUI '21)*. [\[link\]](#)
6. **Lisa Orie**, 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 Systems (CHI EA '21)*. [\[link\]](#)
7. **Lisa Orie**, Luis Alonso, Kent Larson. Methodology for Establishing Well-Being Urban Indicators at the District Level to be used on the CityScope Platform. *Sustainability*. [\[link\]](#)
8. Di Jin, Zhijing Jin, Joey Tianyi Zhou, **Lisa Orie**, 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 (ACL 2020)*. [\[link\]](#)

Other

1. Danielle Wood, Fohla Mouftaou, Temilola Fatoyinbo, David Lagomasino, Ufuoma Ovienmhada, Eric Ashcroft, Lelia Hampton, **Lisa Orii**, TojumiOluwa Adegboyega, Anisha Nakagawa and Juliet Wanyiri. (2019, December). Co-Designing an Environmental Observatory to Support Eco-Entrepreneurship in Benin. *In AGU Fall Meeting Abstracts*.

Under Review

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. Under review at *CHI '25*.
2. **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, & Caryl Feldacker. "They provide the right kind of support." A qualitative study of preferences for differentiated service delivery location among recipients of antiretroviral therapy at Lighthouse Trust in Lilongwe Malawi. Under review at *PLOS ONE*. [[pre-print](#)]

Selected Research Projects

Research methods in **blue**. Programming languages and tools are in **orange**.

Tools for Health Researchers to Maintain Mobile Health Apps

Oct 2024 – Present

Graduate Research Assistant

Advisor: Richard Anderson (UW CSE)

- Exploring designs for software tools that health researchers can use to maintain the content and user interface of mobile health apps.
- Methods and Tools: **Study Design** (ideation, ethics approval), **Semi-Structured Interviews**, **Prototype Design**, **Iterative Design**

Mobile App for Expanding Contraceptive Choice in Kenya

Oct 2023 – Present

Graduate Research Assistant

Advisors: Richard Anderson (UW CSE) & Elizabeth Harrington (UW Dept. of Global Health)

- Developed a tablet-based Android app to provide contraceptive education and decision support for adolescent girls and young women in the Kenyan pharmacy setting.
- Exploring chatbot designs to expand opportunities for app-supported decision-making.
- Methods and Tools: **Study Design** (ideation, ethics approval, execution, publication writing and submission), **Prototype Design**, **Iterative Design**, **Speculative Design**, **Android App Development**, **Co-Design**, **Usability Study**, **Thematic Analysis**, **Flutter**, **Dart**

HIV Data Security and Privacy in Malawi

May 2022 – Sept 2024

Graduate Research Assistant

Advisors: Richard Anderson (UW CSE) & Caryl Feldacker (UW Dept. of Global Health)

- Investigated gaps and opportunities in the security of an open-source mobile medical record system used at a HIV care program in Malawi.
- Developed policy and practice improvements for data security and privacy.
- Methods and Tools: **Study Design** (ideation, ethics approval, execution, publication writing and submission), **Semi-Structured Interviews**, **Focus Group Discussions**, **Thematic Analysis**, **ATLAS.ti**

Strengthening Digital Health Systems for Small and Sick Newborns

Apr 2024 – Sept 2024

Intern at PATH (Digital Square, Primary Health Care teams)

Advisors: Linda Taylor, Kiersten Israel-Ballard, Kimberly Mansen

- Developed recommendations for digital information systems for human milk banking that strengthen newborn care programs in low- and middle-income countries.
- Methods and Tools: **Human-Centered Design**, **Literature Review**

USSD Transaction Failures in Nigeria

Sept 2023 – July 2024

Graduate Research Assistant

Advisors: Richard Anderson (UW CSE), Jake Kendall (DFS Lab)

- Designed a longitudinal repeated measures study to examine USSD reliability in Nigeria.

- Analyzed transaction failure rates between banks and telecommunication providers after a 1-month deployment that resulted in 40,000 USSD sessions.
- Methods and Tools: [Study Design](#) (ideation, recruitment planning, ethics approval), [Quantitative Methods](#), [Python](#), [R](#)

Designs for Recording and Sharing Menopause Experiences Across Generations

Jan 2022 – Oct 2023

Graduate Research Assistant

Advisor: James Fogarty (UW CSE)

- Created design probes for recording and sharing menopause experiences across generations and within families.
- Methods and Tools: [Study Design](#) (ideation, ethics approval, execution, publication writing and submission), [Co-Design](#), [Semi-Structured Interviews](#), [Thematic Analysis](#)

Speech Practice Systems to Improve Self-Perceptions

Apr 2020 – May 2022

Undergraduate Research Intern

Advisor: Takuji Narumi (University of Tokyo)

- Investigated the impact of listening to speech role models and voice manipulation on the self-perception of voice.
- Methods and Tools: [Study Design](#) (ideation, ethics approval, execution, publication writing and submission), [Prototyping](#), [Usability Study](#), [Semi-Structured Interviews](#), [Mixed-Methods](#), [HTML/CSS/JavaScript](#), [R](#)

Awards, Fellowships, and Grants

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

2024

Horton-Hallowell Fellowship

2024

Awarded graduate studies fellowship from Wellesley College Graduate Fellowships.

“Co-Design of a Mobile App to Support Person-Centered Contraceptive Decision Support among Adolescent Girls and Young Women in Kenya in the Pharmacy Setting.”

2024

Received grant from UW’s Global Innovation Fund.

Quad Fellowship

2022

Selected into the inaugural cohort as a representative from Japan.

MIT Technology Review’s Innovators Under 35 Japan

2022

Awarded as a representative from Japan based on research.

Funai Overseas Scholarship

2020

Awarded Japanese Ph.D. fellowship.

Grace Hopper Celebration 2020 Scholarship

2020

Awarded to attend conference for women in tech.

Japan Student Services Organization (JASSO) Scholarship

2017

Awarded Japanese scholarship to pursue undergraduate studies in the U.S.

Grew Bancroft Foundation Scholarship

2017

Awarded Japanese scholarship to study at an American liberal arts college.

Kanazawa Iwao Memorial Foundation Scholarship

2017

Awarded Japanese scholarship to pursue undergraduate studies in the U.S.

Skills

Research Methods & Analysis:

Android app development, Prototyping, Iterative design, Co-design, Speculative design, User study, Usability testing, Mixed-methods, Key informant interviews, Focus group discussions, Thematic analysis

Programming Languages & Tools:

Python, Java, R, C++, HTML/CSS/JavaScript, Dart, Flutter, Figma, Arduino, ArcGIS, ATLAS.ti

Teaching

Graduate Teaching Assistant, University of Washington

Courses: Human-Computer Interaction (W 2024), Capstone Software Design to Empower Underserved Populations (Sp 2024), Computing for Social Good (F 2024)

Undergraduate Teaching Assistant, Wellesley College

Courses: Human-Automation Interaction (Sp 2021), Human-Computer Interaction (Sp 2021), Calculus II (Sp 2018)

Mentorship

Khushi Khandelwal: Senior thesis, Mobile App for Expanding Contraceptive Choice in Kenya

Ariel Fu: Mobile App for Expanding Contraceptive Choice in Kenya

Sandy Cheng: Mobile App for Expanding Contraceptive Choice in Kenya

Shrimayee Narasimhan: Mobile App for Expanding Contraceptive Choice in Kenya

Shobhit Srivastava: Mobile App for Expanding Contraceptive Choice in Kenya

Academic Service

Reviewing

Proceedings of the ACM on Human-Computer Interaction (PACM HCI), CSCW

2023 – Present

ACM CHI Conference on Human Factors in Computing Systems (CHI)

2023 – Present

Organization

UW Change Seminar Co-Organizer

2022 – 2024

UW ICTD Seminar Co-Organizer

2022 – 2024

UW CSE Prospective Student Committee Co-Chair

2023 – 2024

UW Pre-Application Mentorship Service Volunteer

2021 – 2024

Conference Volunteering

ICTD 2022 Student Volunteer Chair

2022

ACM COMPASS 2022 Student Volunteer

2022

Automotive UI 2021 Student Volunteer

2021

Volunteering

Parasaiyo Japan, The Philippines

May 2015 – Present

Supporting orphanage in the Philippines in their pursuits for higher education.

Organizes charity events in Japan to raise donation funds. Makes annual visits to orphanage.

Chinatown Afterschool Program Mentor Boston, MA, USA

Sept 2017 – May 2018

Assisted with providing afterschool instruction for children living in Boston's Chinatown. Supported learning for third grade students.