

Ph.D. Student

College of Information Studies, University of Maryland, College Park, MD

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EDUCATION

Expected 2024 **Ph.D. Information Studies**

College of Information Studies (iSchool)

University of Maryland, College Park

2016 **M.S. Interdisciplinary Information Studies**

Emerging Design and Informatics Program

Graduate School of Interdisciplinary Information Studies

University of Tokyo

2012 **B.S. Cognitive Science with a Specialization in Human Computer Interaction**

Department of Cognitive Science

University of California, San Diego

APPOINTMENTS

2020-Current *Research Assistant II*, University of Maryland, College Park

Extending data science and data-driven technologies to be inclusive for people with disabilities - Appointed for the project of Intelligent Assistive Machines Lab

2020 *Teaching Assistant*, University of Maryland, College Park

Course INST704 Inclusive Design in HCI

2019-2020 *Research Associate II*, Carnegie Mellon University

Conducted mixed methods research (e.g., focus groups, questionnaires, tracking of user command and input logs) to inform the interaction design of robot-assisted shopping for people with visual impairments - Appointed for the project of Cognitive Assistance Lab.

2019 *Visiting Scholar*, Carnegie Mellon University

Conducted field testing and evaluation studies of a smartphone navigation assistant to improve hospital wayfinding - Appointed for the Allegheny General Hospital project.

2017-2019 *Project Researcher*, University of Tokyo

Designed, conducted and analyzed usability studies of computer-vision-assisted video visualization tools for understanding social attention behaviors and group activities.

2016-2017 *Interaction Design Researcher*, Sony Corporation

Developed AR/VR user interfaces and interaction techniques - Published patents to guide user perception and navigation in virtual environments.

SELECTED PUBLICATIONS

Refereed Conference Papers "Sharing Practices for Datasets Related to Wellness, Accessibility, and Aging", **Rie Kamikubo**, Utkarsh Dwivedi, and Hernisa Kacorri. To Appear in Proceedings of the 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS'21), 2021.

"Support Strategies for Remote Guides in Assisting People with Visual Impairments for Effective Indoor Navigation", **Rie Kamikubo**, Naoya Kato, Keita Higuchi, Ryo Yonetani, and Yoichi Sato. In Proceedings of the 2020 ACM Conference on Human Factors in Computing Systems (CHI'20), 2020.

"Assisting Group Activity Analysis through Hand Detection and Identification in Multiple Egocentric Videos", Nathawan Charoenkulvanich, **Rie Kamikubo**, Ryo Yonetani, and Yoichi Sato. In Proceedings of the 24th International Conference on Intelligent User Interfaces (IUI'19), 2019.

“Exploring the Role of Tunnel Vision Simulation in the Design Cycle of Accessible Interfaces”, **Rie Kamikubo**, Keita Higuchi, Ryo Yonetani, Hideki Koike, and Yoichi Sato. In Proceedings of the Internet of Accessible Things (W4A’18), 2018.

“Visualizing Gaze Direction to Support Video Coding of Social Attention for Children with Autism Spectrum Disorder”, Keita Higuchi, Soichiro Matsuda, **Rie Kamikubo**, Takuya Enomoto, Yusuke Sugano, Junichi Yamamoto, and Yoichi Sato. In Proceedings of the 23rd International Conference on Intelligent User Interfaces (IUI’18), 2018.

Symposium/
Workshop/
Poster “Reflections on Remote Learning and Teaching of Inclusive Design in HCI”, Kristen M. Byers, Salma Elsayed-Ali, Ebrima Jarjue, **Rie Kamikubo**, Kyungjun Lee, Rachel Wood, and Hernisa Kacorri, In the 3rd Annual Symposium on HCI Education (EduCHI ’21), 2021. *All authors have contributed equally.

“Data Sharing in Wellness, Accessibility, and Aging”, Hernisa Kacorri, Utkarsh Dwivedi, and **Rie Kamikubo**, In NeurIPS Workshop on Dataset Curation and Security, 2020.

“Rapid Prototyping of Accessible Interfaces With Gaze-Contingent Tunnel Vision Simulation”, **Rie Kamikubo**, Keita Higuchi, Ryo Yonetani, Hideki Koike, and Yoichi Sato. In Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS’17), 2017.

Thesis “Enhancing Web Accessibility for Low Vision Users Using Eye Tracking”, Rie Kamikubo, Master’s Thesis, University of Tokyo, 2016. Advisor: Prof. Yoichi Sato.

AWARDS / HONORS

- 2018-2019 Recipient of Advanced Intelligence Project Grant, Japan Science and Technology Agency
Title: Designing Effective Remote Collaboration in Orientation and Mobility Aid for the Visually Impaired
- 2018-2019 Recipient of Miyoshi Research Grant, Foundation for the Promotion of Industrial Science
Title: Technology to Support Independent Orientation and Mobility of People with Visual Impairment
- 2018 Co-Recipient of Healthcare Robot Proposal Grant, Hitachi, Ltd.
- 2016 Graduate Student Loan Repayment Exemption, Japan Student Services Organization
- 2016 Outstanding Achievement Award, Japan Student Services Organization.
- 2011-2012 Provost’s Honors, UC San Diego

PATENTS

- 2019 Information Processing Apparatus, Information Processing Method, and Program
Japan Patent JP2019125215, International Filing WO2019142560
Filed January 18, 2018 and Published July 25, 2019.
- 2018 U.S. Patent PCT/JP2018015961 Pending, International Filing WO2018216402
Filed April 18, 2018 and Published November 29, 2018.

REFERENCES

Prof. Hernisa Kacorri (hernisa@umd.edu)
College of Information Studies, University of Maryland, College Park

Prof. Chieko Asakawa (chiekoa@andrew.cmu.edu)
IBM, Carnegie Mellon University

Prof. Yoichi Sato (ysato@iis.u-tokyo.ac.jp)
Institute of Industrial Science, University of Tokyo