

Rie Kamikubo

Curriculum Vitae

Ph.D. Student in HCI, Accessibility, and AI
College of Information Studies (iSchool), University of Maryland, College Park, MD
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EDUCATION

- Expected 2024 **Ph.D. Information Studies**
College of Information Studies, University of Maryland, College Park
Advisor: Hernisa Kacorri
- 2016 **M.S. Interdisciplinary Information Studies**
Emerging Design and Informatics Program
Graduate School of Interdisciplinary Information Studies, The University of Tokyo
Advisor: Yoichi Sato
- 2012 **B.S. Cognitive Science with Specialization in Human Computer Interaction**
Department of Cognitive Science, University of California, San Diego

PROFESSIONAL EXPERIENCES

- 2022-Current *HCI Research Intern*, Microsoft Research New England
· Exploring a tool to help machine learning experts define sign language models with deaf signers.
- 2020-Current *Research Assistant II*, University of Maryland, College Park
· Leading a project on ethical collection and sharing of accessibility datasets for inclusive AI.
· Analyzed metadata of AI datasets in Python and visualized data practice trends.
· Assembled and maintained a dataset repository IncluSet built with React and MongoDB.
- 2020 *Teaching Assistant*, Inclusive Design in HCI (INST704), University of Maryland, College Park
· Assisted students with implementation and evaluation of accessible websites and co-design projects.
- 2019-2020 *Research Associate II*, Carnegie Mellon University
· Devised, conducted, and analyzed mixed-method studies (focus groups, Wizard of Oz prototyping, testing) to inform the interface design of robot-assisted mobility for blind people.
- 2019 *Visiting Scholar*, Carnegie Mellon University
· Conducted field studies with blind and sighted users to assess usability and accessibility of a smartphone navigation assistant for hospital wayfinding.
- 2017-2019 *Project Researcher*, University of Tokyo
· Designed and administered usability studies across four projects on computer-vision-assisted tools for affective computing and behavioral analysis.
- 2016-2017 *Interaction Design Researcher*, Sony Corporation
· Developed AR/VR user interfaces and interactive prototypes in Unity and C# – published as US patents on information processing to guide user perception and navigation in VR.

AWARDS / HONORS

- 2022 Simmona Simmons Best Student Paper on Diversity Award
Title: Sharing Practices for Datasets Related to Wellness, Accessibility, and Aging
- 2021 ACM ASSETS Doctoral Consortium
- 2018-2019 Recipient of Advanced Intelligence Project Grant, Japan Science and Technology Agency
Title: Designing Effective Remote Collaboration in Orientation and Mobility Aid – ¥1,000,000
- 2018-2019 Recipient of Miyoshi Research Grant, Foundation for the Promotion of Industrial Science
Title: Technology to Support Orientation and Mobility of People with Visual Impairment – ¥600,000
- 2018 Co-Recipient of Healthcare Robot Proposal Grant, Hitachi, Ltd. – ¥300,000
- 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

PUBLICATIONS

- Peer-Reviewed Conference Papers **Kamikubo, R.**, Dwivedi, U., and Kacorri, H. *Sharing Practices for Datasets Related to Accessibility and Aging*. In Proceedings of the 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2021).

Byers, K. M., Elsayed-Ali, S., Jarjue, E., **Kamikubo, R.**, Lee, K., Wood, R. and Kacorri, H. *Reflections on Remote Learning and Teaching of Inclusive Design in HCI*. In the 3rd Annual Symposium on HCI Education (EduCHI 2021). ***All authors contributed equally.**

Kamikubo, R., Kato, N., Higuchi, K., Yonetani, R., and Sato, Y. *Support Strategies for Remote Guides in Assisting People with Visual Impairments for Effective Indoor Navigation*. In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2020).

Charoenkulvanich, N., **Kamikubo, R.**, Yonetani, R., and Sato, Y. *Assisting Group Activity Analysis through Hand Detection and Identification in Multiple Egocentric Videos*. In Proceedings of the 24th International Conference on Intelligent User Interfaces (IUI 2019).

Kamikubo, R., Higuchi, K., Yonetani, R., Koike, H., and Sato, Y. *Exploring the Role of Tunnel Vision Simulation in the Design Cycle of Accessible Interfaces*. In Proceedings of the Internet of Accessible Things (W4A 2018).

Sugita, Y., Higuchi, K., Yonetani, R., **Kamikubo, R.**, and Sato, Y. *Browsing Group First-Person Videos with 3d Visualization*. In Proceedings of the ACM International Conference on Interactive Surfaces and Spaces (ISS 2018).

Higuchi, K., Matsuda, S., **Kamikubo, R.**, Enomoto, T., Sugano, Y., Yamamoto, J., and Sato, Y. *Visualizing Gaze Direction to Support Video Coding of Social Attention for Children with Autism Spectrum Disorder*. In Proceedings of the 23rd International Conference on Intelligent User Interfaces (IUI 2018).

Kamikubo, R., Higuchi, K., Yonetani, R., Koike, H., and Sato, Y. *Rapid Prototyping of Accessible Interfaces With Gaze-Contingent Tunnel Vision Simulation*. In Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2017).

Peer-Reviewed Workshop Papers Kacorri, H., Dwivedi, U., and **Kamikubo, R.** *Data Sharing in Wellness, Accessibility, and Aging*. In NeurIPS Workshop on Dataset Curation and Security, 2020.

Kamikubo, R., Klebanov, Y., Yonetani, R., and Sato, Y. *A Case Study with Implications of the Mobile Cognitive Pupillometry Research Toolkit*. In the 35th Annual Meeting of the Japanese Cognitive Science Society (JCSS 2018)

Kamikubo, R., Higuchi, K., Yonetani, R., Koike, H., and Sato, Y. *Enhancing Web Accessibility for Low Vision Users using Eye Tracking*. In IEICE Well-being Information Technology (WIT 2016).

PATENTS Head Mounted Display Information Processing Apparatus, Method, and Program

2021 US Patent US20210158605A1, Filed in 2018

2020 US Patent US20200341284A1, Filed in 2018

TALKS AND POSTERS

2022 [Poster] 39th Annual HCIL Symposium, University of Maryland, College Park

Title: IncluSet: A Data Surfacing Repository for Accessibility Datasets

2021 [Talk, Poster] 23rd Int'l ACM SIGACCESS Conference on Computers and Accessibility Doctoral Consortium

Title: Facilitating Sharing and Re-use of Accessibility Datasets: Benefits and Risks

2021 [Talk] 38th Annual HCIL Symposium, University of Maryland, College Park

Title: Supporting Blind People in Recreational Shopping

2021 [Talk] 26th Annual Innovations in Teaching & Learning, University of Maryland, College Park

Title: Reflections on Remote Learning and Teaching of Inclusive Design in HCI

2019 [Invited Talk] Accessibility Lunch Speaker Series, Carnegie Mellon University

Title: Support Strategies for Remote Guides in Assisting People with Visual Impairments for Effective Indoor Navigation

2018 [Poster] 35th Annual Meeting of the Japanese Cognitive Science Society

Title: A Case Study with Implications of the Mobile Cognitive Pupillometry Research Toolkit

2017 [Poster] 19th Int'l ACM SIGACCESS Conference on Computers and Accessibility

Title: Rapid Prototyping of Accessible Interfaces With Gaze-Contingent Tunnel Vision Simulation

SERVICES

2020-2022 Peer Mentor, Intelligent Assistive Machines Lab, University of Maryland, College Park

2022 Data Analysis Mentor, UMD Info Challenge, University of Maryland, College Park

2021 Paper Reviewer, IEEE International Symposium on Mixed and Augmented Reality (ISMAR)

2021 Student Volunteer, Human-Computer Interaction Lab (HCIL) Symposium

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