

# Rie Kamikubo

# Curriculum Vitae

Ph.D. Student in HCI, Accessibility, and AI  
College of Information Studies (iSchool), University of Maryland, College Park, MD  
Email: rkamikub@umd.edu, Web: <https://rkamikubo.com>

## 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

- 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 training 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

- 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

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

2022 Data Science Mentor, UMD Info Challenge (upcoming in Feb.), University of Maryland, College Park

2020-Current Peer Mentor, Intelligent Assistive Machines Lab, 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