

# Rie Kamikubo

Researcher in HCI, Accessibility, and AI  
College of Information Studies (iSchool)  
University of Maryland, College Park  
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## EDUCATION

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

## PROFESSIONAL EXPERIENCE

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| <b>University of Maryland</b> , College of Information Studies, College Park, MD<br>Research Assistant<br>Leading a project on accessibility data for inclusion of people with disabilities in AI.<br><i>Advisor:</i> Hernisa Kacorri      | 2020-Current |
| <b>Microsoft Research</b> , New England Lab, Cambridge, MA<br>HCI Research Intern<br>Led a project on designing resources for inclusive development of sign language AI systems.<br><i>Mentors:</i> Danielle Bragg, Alex Lu, Hal Daumé III | 2022         |
| <b>University of Maryland</b> , College of Information Studies, College Park, MD<br>Teaching Assistant, Inclusive Design in HCI (INST704)<br>Assisted students with implementation of accessible websites and co-design projects.          | 2020         |
| <b>Carnegie Mellon University</b> , Robotics Institute, Pittsburgh, PA<br>Research Associate<br>Led a project to inform the interface design of robot-assisted mobility for blind people.<br><i>Mentor:</i> Chieko Asakawa                 | 2019-2020    |
| Visiting Scholar<br>Conducted field studies with blind users to assess usability of a mobile navigation assistant.<br><i>Hosts:</i> Kris Kitani, Chieko Asakawa  | 2019         |
| <b>University of Tokyo</b> , Institute of Industrial Science, Tokyo, Japan<br>Project Researcher<br>Designed and administered usability studies on computer vision based tools for behavioral analysis.<br><i>Mentor:</i> Yoichi Sato      | 2017-2019    |
| <b>Sony Corporation</b> , R&D Center, Tokyo, Japan<br>Interaction Design Researcher<br>Developed AR/VR user interfaces – published as US patents on guiding user perception and navigation.  | 2016-2017    |

## AWARDS AND HONORS

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| ACM SIGCHI Gary Marsden Travel Awards  | 2023      |
| ACM FAccT Doctoral Colloquium  | 2023      |
| Accelerator Fellowship, School of Public Policy, University of Maryland                | 2023      |
| Simmona Simmons Best Student Paper on Diversity Award, iSchool, University of Maryland | 2022      |
| IBM PhD Fellowship Nomination (1 of 4 nominees), University of Maryland                | 2021      |
| ACM ASSETS Doctoral Consortium   | 2021      |
| Healthcare Robot Research Competition Award, Hitachi, Ltd.                             | 2018      |
| Graduate Student Loan Repayment Exemption, Japan Student Services Organization         | 2016      |
| Outstanding Achievement Award, Japan Student Services Organization                     | 2016      |
| Provost's Honors, UC San Diego   | 2011-2012 |

## PUBLICATIONS

### Peer-Reviewed Conference Papers

- **Kamikubo, R.**, Lee, K., and Kacorri, H. 2023. *Contributing to Accessibility Datasets: Reflections on Sharing Study Data by Blind People*. To Appear In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI'23).
- **Kamikubo, R.**, Wang, L., Marte, C., Mahmood, A., and Kacorri, H. 2022. *Data Representativeness in Accessibility Datasets: A Meta-Analysis*. In Proceedings of the 24th Int'l ACM SIGACCESS Conference on Computers and Accessibility (ASSETS'22).
- **Kamikubo, R.**, Dwivedi, U., and Kacorri, H. 2021. *Sharing Practices for Datasets Related to Accessibility and Aging*. In Proceedings of the 23rd Int'l ACM SIGACCESS Conference on Computers and Accessibility (ASSETS'21).
- Byers, K. M., Elsayed-Ali, S., Jarjue, E., **Kamikubo, R.**, Lee, K., Wood, R. and Kacorri, H. 2021. *Reflections on Remote Learning and Teaching of Inclusive Design in HCI*. In the 3rd Annual Symposium on HCI Education (EduCHI'21). **\*All authors contributed equally.**
- **Kamikubo, R.**, Kato, N., Higuchi, K., Yonetani, R., and Sato, Y. 2020. *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'20).
- Charoenkulvanich, N., **Kamikubo, R.**, Yonetani, R., and Sato, Y. 2019. *Assisting Group Activity Analysis through Hand Detection and Identification in Multiple Egocentric Videos*. In Proceedings of the 24th Int'l Conference on Intelligent User Interfaces (IUI'19).
- **Kamikubo, R.**, Higuchi, K., Yonetani, R., Koike, H., and Sato, Y. 2018. *Exploring the Role of Tunnel Vision Simulation in the Design Cycle of Accessible Interfaces*. In Proceedings of the Internet of Accessible Things (W4A'18).
- Sugita, Y., Higuchi, K., Yonetani, R., **Kamikubo, R.**, and Sato, Y. 2018. *Browsing Group First-Person Videos with 3d Visualization*. In Proceedings of the ACM Int'l Conference on Interactive Surfaces and Spaces (ISS'18).
- Higuchi, K., Matsuda, S., **Kamikubo, R.**, Enomoto, T., Sugano, Y., Yamamoto, J., and Sato, Y. 2018. *Visualizing Gaze Direction to Support Video Coding of Social Attention for Children with Autism Spectrum Disorder*. In Proceedings of the 23rd Int'l Conference on Intelligent User Interfaces (IUI'18).
- **Kamikubo, R.**, Higuchi, K., Yonetani, R., Koike, H., and Sato, Y. 2017. *Rapid Prototyping of Accessible Interfaces With Gaze-Contingent Tunnel Vision Simulation*. In Proceedings of the 19th Int'l ACM SIGACCESS Conference on Computers and Accessibility (ASSETS'17).

### Peer-Reviewed Workshop Papers

- Kacorri, H., Dwivedi, U., and **Kamikubo, R.** 2020. *Data Sharing in Wellness, Accessibility, and Aging*. In NeurIPS Workshop on Dataset Curation and Security.
- **Kamikubo, R.**, Klebanov, Y., Yonetani, R., and Sato, Y. 2018. *A Case Study with Implications of the Mobile Cognitive Pupillometry Research Toolkit*. In the 35th Annual Meeting of the Japanese Cognitive Science Society (JCSS'18)
- **Kamikubo, R.**, Higuchi, K., Yonetani, R., Koike, H., and Sato, Y. 2016. *Enhancing Web Accessibility for Low Vision Users using Eye Tracking*. In IEICE Well-being Information Technology (WIT'16).

## GRANTS

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|---|------|
| Advanced Intelligence Project Grant, Japan Science and Technology Agency, ¥1,000,000(≈\$9.1k) | 2019 |
| <i>Title: Designing Effective Remote Collaboration in Orientation and Mobility Aid</i>        |      |
| Miyoshi Research Grant, Foundation for the Promotion of Industrial Science, ¥600,000(≈\$5.5k) | 2018 |
| <i>Title: Technology to Support Orientation and Mobility of People with Visual Impairment</i> |      |

## PATENTS

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| Head Mounted Display Information Processing Apparatus, Method, and Program | 2020, 2021 |
| US Patent US20210158605A1, US Patent US20200341284A1 (Filed in 2018)       |            |

## TALKS AND POSTERS

- |   |      |
|---|------|
| [Poster] 39th Annual HCIL Symposium, University of Maryland                                 | 2022 |
| <i>Title: IncluSet: A Data Surfacing Repository for Accessibility Datasets</i>              |      |
| [Talk, Poster] 23rd ACM SIGACCESS Conference on Computers and Accessibility                 | 2021 |
| Doctoral Consortium   |      |
| <i>Title: Facilitating Sharing and Re-use of Accessibility Datasets: Benefits and Risks</i> |      |
| [Talk] 38th Annual HCIL Symposium, University of Maryland                                   | 2021 |
| <i>Title: Supporting Blind People in Recreational Shopping</i>                              |      |

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| [Talk] 26th Annual Innovations in Teaching & Learning, University of Maryland<br><i>Title: Reflections on Remote Learning and Teaching of Inclusive Design in HCI</i>   | 2021 |
| [Invited Talk] Accessibility Lunch Speaker Series, Carnegie Mellon University<br><i>Title: Support Strategies for Remote Guides in Assisting People with Visual Impairments for Effective Indoor Navigation</i> | 2019 |
| [Poster] 35th Annual Meeting of the Japanese Cognitive Science Society<br><i>Title: A Case Study with Implications of the Mobile Cognitive Pupillometry Research Toolkit</i>                                    | 2018 |
| [Poster] 19th ACM SIGACCESS Conference on Computers and Accessibility<br><i>Title: Rapid Prototyping of Accessible Interfaces With Gaze-Contingent Tunnel Vision Simulation</i>                                 | 2017 |

## SERVICES

### Paper Reviewer

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|---|------|
| ACM Conference on Fairness, Accountability and Transparency (FAccT) | 2023 |
| ACM Conference on Human Factors in Computing Systems (CHI)          | 2023 |
| IEEE International Symposium on Mixed and Augmented Reality (ISMAR) | 2021 |

### Student Volunteer

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| ACM SIGACCESS Conference on Computers and Accessibility (ASSETS) | 2022 |
| Human-Computer Interaction Lab (HCIL) Symposium                  | 2021 |

### Mentor

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| Data hackathon teams, UMD Info Challenge, University of Maryland         | 2022      |
| Urja Thakkar, M.S. in Human-Computer Interaction, University of Maryland | 2021-2022 |
| Amnah Mahmood, B.S. in Mathematics, University of Maryland               | 2021      |
| Naoya Kato, M.S. in Computer Science, University of Tokyo                | 2018-2019 |
| Nathawan Charoenkulvanich, M.S. in Computer Science, University of Tokyo | 2017-2018 |

### Committee Member

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| Accessibility Studies Program, University of Maryland             | 2023      |
| Tenure Track Search in Data Visualization, University of Maryland | 2022-2023 |