Masaki Kuribayashi

Last Updated: Jan. 2023

Master's Student at Shigeo Morishima Laboratory,
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Waseda University.

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Master's Student at Waseda University. Interested in the field of Human-Computer Interaction, particularly in Accessibility. Experience in conducting user-centered & inclusive design with people with visual impairment, development of navigation systems using smartphones and robots, designing/conducting user studies, and conducting statistical analysis. Expected to complete the Master's program in Mar. 2023 with a GPA of 3.56/4.00 and enter the Ph.D. program at Waseda University in Apr. 2023.

Education

Apr. 2021 - Current
Master of Engineering
Graduate School of Advanced Science and Engineering, Waseda University
Advisor: Shigeo Morishima

Apr. 2017 - Mar. 2021
Bachelor of Science
Department of Physics, Waseda University
Advisor: Shigeo Morishima

Work Experience

Apr. 2023 - Mar. 2026
Research Fellow DC1
JSPS Research Fellowship for Young Scientists

Apr. 2021 - Current
Research Intern
IBM Research - Tokyo
Advisor: Chieko Asakawa, Hironobu Takagi
Developed a navigation application for bind people on iOS smartphone.

Jun. 2022 - Sep. 2022
Research Intern
Cognitive Assistance Lab, Robotics Institute, Carnegie Mellon University
Advisor: Chieko Asakawa, Daisuke Sato
Developed a deep learning based sign recognition model and navigation robot for blind people.

Awards

Mar. 2021
Azusa Ono Memorial Award
Waseda University
The most prestigious award by Waseda University, which 0.014% of students receive.

Dec. 2020
Best Paper Award
JSPS WISS 2020 (a domestic conference in Japan)
An award that the top 3% of paper receives.

Scholarship

Apr. 2023 - Mar. 2026
JSPS Research Fellowship for Young Scientists (DC1, "Gakushin")
Funding which the top 14% of research proposals receive.

Skills

Programming Language: **Swift, Python**

Frameworks / Platforms: **Xcode, ARKit, OpenCV, Docker**

Others: **XCode, Adobe CC (Illustrator, Premiere Pro, and InDesign), User Studies, Statistical Analysis**

Publications

Journal Papers and Conference Full Papers

[1] **Masaki Kuribayashi***, Seita Kayukawa*, Hironobu Takagi, Chieko Asakawa, and Shigeo Morishima (* - equal contribution). 2021. **LineChaser: A Smartphone-Based Navigation System for Blind People to Stand in Line.** In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems. (CHI 2021). DOI: https://doi.org/10.11 45/3411764.3445451

[2] **Masaki Kuribayashi**, Seita Kayukawa, Jayakorn Vongkulbhisal, Daisuke Sato, Chieko Asakawa, Hironobu Takagi, Shigeo Morishima. 2022. **Corridor-Walker: Mobile Indoor Walking Assistance for Blind People to Avoid Obstacles and Recognize Intersections.** In Proceedings of the 24th International Conference on Human-Computer Interaction with Mobile Devices and Services. (Mobile HCI 2022). DOI: https://doi.org/10.1145/3546714

[3] **Masaki Kuribayashi,** Tatsuya Ishihara, Daisuke Sato, Jayakorn Vongkulbhisal, Karnik Ram, Seita Kayukawa, Hironobu Takagi, Shigeo Morishima, and Chieko Asakawa. 2023. **PathFinder: Designing a Map-less Navigation System for Blind People in Unfamiliar Buildings.** In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems. (CHI 2023). To appear.

[4] Yusuke Miura, Erwin Wu, **Masaki Kuribayashi**, Hideki Koike, Shigeo Morishima. 2023. **Exploration of Sonification Feedback for People with Visual Impairment to Use Ski Simulator.** Augmented Humans 2023. (AHs 2023). To appear.

Short Papers and Posters

[5] **Masaki Kuribayashi**, Seita Kayukawa, Jayakorn Vongkulbhisal, Daisuke Sato, Chieko Asakawa, Hironobu Takagi, Shigeo Morishima. 2021. **Designing a Smartphone-Based Assistance System for Blind People to Recognize Intersections and Obstacles in Indoor Corridors.** Mobile and Ubiquitous Systems. (Mobiquitous 2021).

[6] Yusuke Miura, **Masaki Kuribayashi**, Erwin Wu, Hideki Koike, Shigeo Morishima. 2022. **A Study on Sonification Method of Simulator-Based Ski Training for People with Visual Impairment.** SIGGRAPH Asia 2022 Posters. (SA '22 Posters).

Academic Service

CHI 2023 LBW Reviewer