

Seita Kayukawa

Ph. D. Student (Apr. 2020 ~)

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Education

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| Apr. 2020 - Present | Ph. D. Student Graduate School of Advanced Science and Engineering, Waseda University Advisor: Shigeo Morishima |
| Apr. 2018 - Mar. 2020 | Master of Engineering Graduate School of Advanced Science and Engineering, Waseda University Advisor: Shigeo Morishima |
| Apr. 2014 - Mar. 2018 | Bachelor of Science Department of Applied Physics, Waseda University Advisor: Shigeo Morishima |

Work Experience

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| Apr. 2020 - Present | Research Fellow (DC1) JSPS Research Fellowship for Young Scientists |
| Apr. 2018 - Mar. 2020 | Research Intern IBM Research - Tokyo Advisor: Tatsuya Ishihara, Hironobu Takagi, and Chieko Asakawa |
| Apr. 2014 - Mar. 2018 | Research Intern Cognitive Assistance Lab., Robotics Institute, Carnegie Mellon University Advisor: Keita Higuchi, Chieko Asakawa, and Kris Kitani |

Research Interest

Human-Computer Interaction; Accessibility; Video Browsing

Publications

- [1] Seita Kayukawa, Tatsuya Ishihara, Hironobu Takagi, Shigeo Morishima, and Chieko Asakawa. 2020. **Guiding Blind Pedestrians in Public Spaces by Understanding Walking Behavior of Nearby Pedestrians**. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*. 4, 3, Article 85 (September 2020), 22 pages.
DOI: <https://dx.doi.org/10.1145/3290605.3300282>
- [2] Seita Kayukawa, Keita Higuchi, João Guerreiro, Shigeo Morishima, Yoichi Sato, Kris Kitani, and Chieko Asakawa. 2019. **BBeep: A Sonic Collision Avoidance System for Blind Travellers and Nearby Pedestrians**. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*.
DOI: <https://dx.doi.org/10.1145/3290605.3300282>
- [3] Seita Kayukawa, Hironobu Takagi, João Guerreiro, Shigeo Morishima, and Chieko Asakawa. 2020. **Smartphone-Based Assistance for Blind People to Stand in Lines**. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20 LBW)*.
DOI: <https://doi.org/10.1145/3334480.3382954>
- [4] Seita Kayukawa, Tatsuya Ishihara, Hironobu Takagi, Shigeo Morishima, and Chieko Asakawa. 2020. **BlindPilot: A Robotic Local Navigation System that Leads Blind People to a Landmark Object**. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20 LBW)*.
DOI: <https://dx.doi.org/10.1145/3170427.3189085>
- [5] Ryo Shimamura, Seita Kayukawa, Takayuki Nakatsuka, Shoki Miyagawa, and Shigeo Morishima. 2019. **A Study on the Sense of Burden and Body Ownership on Virtual Slope**. In *Proceedings of the IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR '19 Poster)*.
DOI: <https://dx.doi.org/10.1109/VR.2019.8797960>
- [6] Seita Kayukawa, Keita Higuchi, Ryo Yonetani, Masanori Nakamura, Yoichi Sato, and Shigeo Morishima. 2018. **Dynamic Object Scanning: Object-Based Elastic Timeline for Quickly Browsing First-Person Videos**. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18 LBW and DEMO)*.
DOI: <https://dx.doi.org/10.1145/3170427.3189085>

Awards

- Mar. 2020** **IPSJ Yamashita SIG Research Award**
Information Processing Society of Japan (IPSJ)
- Mar. 2019** **Azusa Ono Memorial Award**
Waseda University
- Mar. 2019** **Best Paper Award**
IPSJ Interaction 2019 (a Domestic Conference in Japan)

Scholarships

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| May 2020 - Current | Early Bird Program (Support for Young Researchers), Waseda Research Institute for Science and Engineering |
| Apr. 2018 - Mar. 2020 | JASSO Scholarship for Outstanding Master Students |
| May 2018 - Sept. 2018 | Visiting Support from Super Global University |
| May 2018 - Aug. 2018 | JASSO Scholarship for Short-term Study Abroad |

Skills

Programming Languages: C++, Python, Swift, HTML, CSS

Libraries / Platforms: OpenCV, Qt5, ROS, Arduino, CMake

OS: macOS, Ubuntu

Others: Adobe CC (Illustrator, Premiere Pro, Photoshop, InDesign)

User Studies, Statistical Analysis

Machine Learning, Coursera MOOC by Andrew NG, Nov. 2018

Updated: July 25, 2020