

Seita Kayukawa

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Education

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| Apr. 2018 - Present | 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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| Feb. 2019 - Present | Research Intern,
IBM Research - Tokyo.
Advisor: Tatsuya Ishihara, Hironobu Takagi, and Chieko Asakawa |
| May 2018 - Sept. 2018 | Research Intern,
Cognitive Assistance Lab., Robotics Institute, Carnegie Mellon University.
Advisor: Keita Higuchi, Chieko Asakawa, and Kris Kitani |
| Apr. 2017 - Present | Assistant Researcher,
JST ACCEL, OngaACCEL Project. |

Research Interests

Human-Computer Interaction; Accessibility; Video Browsing

Scholarship

- [1] Visiting support from Super Global University (SGU), Japan. (May 2018 - Sept. 2018)
- [2] Japan Student Services Organization (JASSO) Scholarship for short-term study abroad, Japan. (May 2018 - Aug. 2018)

Publications

- [1] **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 *Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI '19)*. DOI: <http://dx.doi.org/10.1145/3290605.3300282>

- [2] **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>

- [3] **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: <http://dx.doi.org/10.1145/3170427.3189085>

- [4] 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 *Proc. IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR '19 Poster)*. DOI: <http://dx.doi.org/10.1109/VR.2019.8797960>

- [5] **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: <http://dx.doi.org/10.1145/3170427.3189085>

Awards

- [1] **IPSJ Yamashita SIG Research Award**. Information Processing Society of Japan (IPSJ). (Aug. 2019)
- [2] **Azusa Ono Memorial Award**. Waseda University. (Mar. 2019)
- [3] **Best Paper Award** at IPSJ Interaction 2019. (Mar. 2019)

Skills

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

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

OS: macOS, Ubuntu

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

User Studies, Statistical Analysis

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

Updated: Mar. 3, 2020