Seita Kayukawa

Ph. D. Student (Apr. 2020 ~)

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Education

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

Apr. 2020 - Present Research Fellow (DC1)

JSPS Research Fellowships for Young Scientists.

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

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)

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)

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: Apr. 2, 2020