Tokyo, Japan
hashimoto@cyber.t.u-tokyo.ac.jp
www.tkrtkr.com

TAKERU **HASHIMOTO**

Education

2020–present **PhD student**
The University of Tokyo, Japan, with Prof.Takuji Narumi

2018–2020 **Master in Information science and technology**
The University of Tokyo, Japan, with Prof.Michitaka Hirose
Thesis Theme: "Rendering various shapes of virtual objects using torque feedback proxy"

2014–2018 **B.Sc in Mechano-informatics**
The University of Tokyo, Japan, with Prof.Michitaka Hirose
Thesis Theme: "Effect of pseudo-Haptic feedback on touch-screens on attention and memory during image browsing"

Work Experiences

2020 – present **Research Assistant, The University of Tokyo.**
As a research assistant in my lab, I not only conduct my own research, but also mentor about master's and undergraduate students in their research.

2019 Mar –2020 Mar **Prototype Design Engineer, mplusplus.Co.,Ltd.**
Prototyping of glowing props for live performance

2018 Oct-Dec **VR Engineer Intern, GREE, Inc.**
Developing the VR app that lets you experience moon skiing and the AR app to learn how to perform server maintenance.

2018 Mar-Oct **Android App Engineer, Sony Music Communications Inc.**
Developing the AR app that enables you to take photos with anime characters where they have been set

Honors / Grants

Apr 2021 - Mar 2023 **Research Fellow DC2**
Funded for two years by The Japan Society for the Promotion of Science (JSPS) Research Fellowships for Young Scientists.

Apr 2021 - Mar 2023 **Competitive Research Assistant (IST-RA)**
withdrewed because it could not be used in conjunction with DC2.

Apr 2021 - Mar 2022 **The University of Tokyo Toyota-Dwango Scholarship for Advanced AI Talent 2021**
Funded for one year by the University of Tokyo.

Apr 2020 - Mar 2021 **The University of Tokyo Toyota-Dwango Scholarship for Advanced AI Talent 2020**
Funded for one year by the University of Tokyo.

Mar 2020 **Young Researcher's Award**
the Virtual Reality Society of Japan

May 2019 **Honorable Mentions Award**
ACM SIGCHI 2019

Software Skills

Basic SmartPhone app (Swift, Android Java)

Intermidiate Web Frontend(HTML, CSS), Statistics, Data science(python), Adobe Illustator / Photoshop / Premiere / After Effects

Advanced ROS, Gazebo, Fusion360, Unity3D, C++, C#, python

Hardware Skills

Basic Sheet metal working

Intermidiate PCB design, Machining

Advanced CAD, Prototyping (Laser-cut, 3D print)

Languages

Japanese Mothertongue

English Intermediate

Research Interests

Human Computer Interaction
Human Robot Interaction
Augmented Human with Robotics
Rendering Haptics (especially kinesthesia) in Virtual Environment

Publications

Jornals / Papers (Peer Reviewed)

2021 **Full Paper**, Shuntaro Shimizu, **Takeru Hashimoto**, Shigeo Yoshida, Reo Matsumura, Takuji Narumi, Hideaki Kuzuoka, Unident: Providing Impact Sensations on Handheld Objects via High-Speed Change of the Rotational Inertia, in Proc. of IEEE VR 2021, 2021.

2019 **Full Paper**, Jotaro Shigeyama*, **Takeru Hashimoto***, Shigeo Yoshida, Takuji Narumi, Tomohiro Tanikawa, Michitaka Hirose . Transcalibur: A Weight Shifting Virtual Reality Controller for 2D Shape Rendering based on Computational Perception Model. CHI Conference on Human Factors in Computing Systems Proceedings. ***The first two authors contributed equally to this work.**

2018 **Jornal Paper**,**Takeru Hashimoto**, Takuji Narumi, Ryohei Nagao, Tomohiro Tanikawa, Michitaka Hirose. Content-aware Browsing by Pseudo-haptic Feedback on Touch Screens, Transactions of the Virtual Reality Society of Japan, 2018, Volume 23, Issue 3, Pages 139-148 (in Japanese)

2018 **Full Paper**, **Takeru Hashimoto**, Takuji Narumi, Ryohei Nagao, Tomohiro Tanikawa, Michitaka Hirose . Effect of Pseudo-Haptic Feedback on Touchscreens on Visual Memory During Image Browsing, Eurohaptics 2018.

Posters / Demos (Peer Reviewed)

2019 **Demo**, Yuhu Liu, **Takeru Hashimoto**, Shigeo Yoshida, Takuji Narumi, Tomohiro Tanikawa, Michitaka Hirose . ShapeSense: a 2D shape rendering VR device with moving surfaces that controls mass properties and air resistance. ACM SIGGRAPH 2019 Emerging Technologies.

2019 **Demo**, Jotaro Shigeyama, **Takeru Hashimoto**, Shigeo Yoshida, Takuji Narumi, Tomohiro Tanikawa, and Michitaka Hirose. Demonstration of Transcalibur: A VR Controller that Presents Various Shapes of Handheld Objects. Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems.

2019 **Poster**, Jotaro Shigeyama, **Takeru Hashimoto**, Shigeo Yoshida, Taiju Aoki, Takuji Narumi, Tomohiro Tanikawa, and Michitaka Hirose. 2018. Transcalibur: dynamic 2D haptic shape illusion of virtual object by weight moving VR controller. ACM SIGGRAPH 2018 Posters.

2018 **Demo**, Jotaro Shigeyama, **Takeru Hashimoto**, Shigeo Yoshida, Taiju Aoki, Takuji Narumi, Tomohiro Tanikawa, Michitaka Hirose . Transcalibur: weight moving VR controller for dynamic rendering of 2D shape using haptic shape illusion. ACM SIGGRAPH 2018 Emerging Technologies.

2017 **Demo**, Keigo Matsumoto, **Takeru Hashimoto**, Junya Mizutani, Hibiki Yonahara, Ryohei Nagao, Takuji Narumi, Tomohiro Tanikawa, and Michitaka Hirose. 2017. Magic table: deformable props using visuo haptic redirection. SIGGRAPH Asia 2017 Emerging Technologies.