



# 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

2014-2018 B.Sc in Mechano-informatics

The University of Tokyo, Japan, with Prof. Michitaka Hirose

**Work Experiences** 

2019-present **Prototype Design Engineer, Mplusplus.Co.Ltd.** 

Prototyping of glowing props for live performance

2018 winter VR Engineer Intern, GREE, Inc.

Developing the VR app that lets you experience moon skiing and

the AR app to learn how to check server

2018 summer 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

Awards

May 2019 Honorable Mentions Award, CHI2019

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

**Software Skills** 

Basic SmartPhone app (Swift, Android Java)

Intermidiate Web Frontend(HTML, CSS), Statistics, Data science, 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, CNC)

## Languages

Japanese English Mothertongue Intermediate

#### **Interests**

Human Computer Interaction Human Robot Interaction Augmented Human with Robotics Rendering Haptics in Virtual Reality

#### **Publications**

### Jornals / Papers (Peer Reviewed)

- 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.
- 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
- 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.