

# Dr. Shohei Mori

Postdoctoral Researcher, ICG, Graz Univ. of Technology Guest Lecture (Global), Grad. School of Science and Tech., Keio Univ.

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Web: https://mugichoko445.bitbucket.io/ GitHub: https://github.com/Mugichoko445

# **EDUCATION**

Doctor of EngineeringApril 2013 – March 2016Graduate School of Information Science and Engineering, Ritsumeikan UniversityShiga, JapanMaster of EngineeringMarch 2011 – April 2013Graduate School of Information Science and Engineering, Ritsumeikan UniversityShiga, Japan

Graduate School of Information Science and Engineering, Ritsumeikan University **Bachelor of Science** 

Ritsumeikan University

March 2007 – April 2011 Shiga, Japan

# WORK EXPERIENCE

Postdoctoral Researcher (University Project Assistant)

Graz University of Technology

**Guest Lecturer (Global)** 

Keio University

**Guest Researcher (University Project Assistant)** 

Graz University of Technology

Visiting Researcher (JSPS PD)

Keio University

Research Fellow (JSPS DC-1)

Ritsumeikan University

October 2018 - Present

Styria, Austria

April 2021 – March 2022 Kanagawa, Japan

August 2017 – September 2018

Styria, Austria

April 2016 – September 2018

Kanagawa, Japan

April 2013 – March 2016

Shiga, Japan

### **TEACHING**

## **PROJECTS**

FWF - Real-time Three-dimensional Diminished Reality Co-Investigator (January 2021 – December 2024)

Grant-in-Aid for Young Scientists (B) - 17K12729 Principal Investigator (April 2017 – September 2018)

Grant-in-Aid for JSPS Fellows (PD) - 16J05114 Research Fellow (April 2016 – September 2018)

Grant-in-Aid for JSPS Fellows (DC-1) - 13J09193 Research Fellow (April 2013 – March 2016)

Grant-in-Aid for Scientific Research (S) - 24220004 Research Collaborator (May 2012 – March 2017)

#### SERVICE

**Academic Journal Committee** The Virtual Reality Society of Japan (2020 – Present)

Support Member ISO/IEC JTC 1/SC 24/WG 9 (AR continuum concepts and reference model) (2016, 2017),

TrakMark (Benchmark test schemes for AR/MR geometric registration and tracking methods) (2015, 2016)

IPC member / DC co-chair / We co-chair / Demo co-chair IEEE VR (2019, 2021), IEEE ISMAR (2020, 2021), 3DWeb (2020), ICAT-EGVE (2017) / IEEE ISMAR (2020) / IEEE VR (2019) / IEEE ISMAR (2018)

Peer-review (Journal) IEEE TVCG (2018, 2020), IEEE CG&A (2020), IEEE TIM (2020), IEEE TOM (2016), etc.

**Peer-review (Conference)** IEEE VR (2018 – 2021), IEEE ISMAR (2017–2021), ACM CHI (2020), IEEE InfoVis (2020), ACM VRST (2019), AH (2019), ICAT-EGVE (2017, 2019), ACM 3DWeb (2020), APMAR (2018, 2019), etc.

# AWARDS AND SCHOLARSHIPS

Best Paper / Demo / Presentation / Reading Group Award: IEEE Workshop KELVAR (2020) / IEEE ISMAR (2015) / KJMR (2014, 2015) / ICCVSS (2016)

**Scholarship**: Ritsumeikan University Saionji Graduate School Encouragement Scholarship (For the top graduate) (2011) / Saionji Ikuei Scholarship (For the top three high achievers) (2008 – 2010) / Dean Award (2009) / Education Award (2007, 2008)

<sup>&</sup>quot;Realtime Visualisation" at FHSalzburg in collaboration with Markus Tatzgern (2020, 2021)

<sup>&</sup>quot;Augmented Reality" at TUGraz in collaboration with Denis Kalkofen and Peter Roth (2018, 2019)

<sup>&</sup>quot;Experiments in Media Technology - Virtual/Mixed Reality" at Ritsumeikan University - TA (2011, 2012)

Languages: Japanese (Native), English (TOEIC: 830), German (Novice)

Programming: C++, OpenGL/GLSL, Python, C# (Unity), R

## SELECTED PUBLICATIONS

David Mandl, Peter Mohr, Tobias Langlotz, Christoph Ebner, Shohei Mori, Stefanie Zollmann, Peter Roth, and Denis Kalkofen, Neural Cameras: Learning Camera Characteristics for Coherent Mixed Reality Rendering, IEEE Symp. on Mixed and Augmented Reality (ISMAR) (2021.10) (To Appear)

Stefanie Zollmann, Raphael Grasset, Tobias Langlotz, Wei Hong Lo, Shohei Mori, and Holger Regenbrecht, *Visualization Techniques in Augmented Reality: A Taxonomy, Methods and Patterns*, IEEE Trans. on Visualisation and Computer Graphics (TVCG) (2021.9)

Shohei Mori, Okan Erat, Wolfgang Broll, Hideo Saito, Dieter Schmalstieg, and Denis Kalkofen, *InpaintFusion: Incremental RGB-D Inpainting for 3D Scenes*, IEEE Trans. on Visualisation and Computer Graphics (TVCG), Vol. 26, Issue 10 (2020.10)

Masahiro Yamaguchi, <u>Shohei Mori</u>, Peter Mohr, Markus Tatzgern, Ana Stanescu, Hideo Saito, and Denis Kalkofen, *Video-Annotated Augmented Reality Assembly Tutorials*, Proc. ACM Symp. on User Interface Software and Technology (UIST), pp. 1010–1022 (2020.10)

Masahiro Yamaguchi, <u>Shohei Mori</u>, Hideo Saito, Shoji Yachida, and Takashi Shibata, *Global-Map-Registered Local Visual Odometry Using On-the-Fly Pose Graph Updates*, Proc. Int. Conf. on Augmented Reality, Virtual Reality, and Computer Graphics (SALENTO AVR) (2020.7)

Hideaki Uchiyama, Takafumi Taketomi, Sei Ikeda, and <u>Shohei Mori</u>, *Basics and Advances in Monocular vSLAM Smart Sensors and Systems: Technology Advancement and Application Demonstrations*, Springer International Publishing, pp. 93-104 (2020.6)

Peter Mohr-Ziak, Shohei Mori, Tobias Langlotz, Bruce H. Thomas, Dieter Schmalstieg, and Denis Kalkofen, Mixed Reality Light Fields for Interactive Remote Assistance, Proc. ACM CHI Conf. on Human Factors in Computing Systems (CHI) (2020.4)

Denis Kalkofen, <u>Shohei Mori</u>, Tobias Ladinig, Lea Daling, Anas Abdelrazeq, Markus Ebner, Manuel Ortega, Susanne Feiel, Sebastian Gabl, Taras Shepel, James Tibbett, Teemu H. Laine, Michael Hitch, Carsten Drebenstedt, and Peter Mose, *Tools for Teaching Mining Students in Virtual Reality based on 360° Video Experiences*, IEEE VR Workshop on K-12+ Embodied Learning through Virtual & Augmented Reality (KELVAR) (2020.3)

Tomoya Kaichi, Shohei Mori, Hideo Saito, Kosuke Takahashi, Dan Mikami, Mariko Isogawa, Yoshinori Kusachi, *Image-based Center of Mass Estimation of the Human Body via 3D Shape and Kinematic Structure*, Sports Engineering, 22:17 (2019.12)

Satoshi Hashiguchi, <u>Shohei Mori</u>, Miho Tanaka, Fumihisa Shibata, and Asako Kimura, *Perceived Weight of a Rod under Augmented and Diminished Reality Visual Effects*, Proc. The ACM Symp. on Virtual Reality Software and Technology (VRST) (2018.11)

Shohei Mori, Sei Ikeda, Alexander Plopski, and Christian Sandor, *BrightView: Increasing Perceived Brightness of Optical See-Through Head-Mounted Displays Through Unnoticeable Incident Light Reduction*, Proc. IEEE Virtual Reality (2018.3)

for the other publications, please refer to my personal website.

## **TUTORIALS**

Markus Tatzgern, Shohei Mori, Christoph Ebner, David Mandl, Kasper Ladefoged, Peter Mohr, and Denis Kalkofen, Rendering and Visualization in Mixed Reality, Eurographics 2021 (2021.5.4)

<u>Shohei Mori</u>, *Diminished Reality: History, New Definition, and Recent Progress*, Diminished Reality Tutorial at IEEE ISMAR 2014 (2014.9.9)

# **INVITED TALKS**

Shohei Mori and Hideo Saito, *Augmented Visualization: Observing as Desire*, Asia-Pacific Signal and Information Processing Association Annual Summit and Conf. (APSIPA ASC) 2017 (2017.12.13)

Shohei Mori, Augmented and Diminished Reality: Computational Imaging of Existence and Non-Existence, Int. Display Workshop (IDW) 2017 (2017.12.8)