

Dr. Shohei Mori

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

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

EDUCATION

Doctor of Engineering
Graduate School of Information Science and Engineering, Ritsumeikan University

Master of Engineering
Graduate School of Information Science and Engineering, Ritsumeikan University

Bachelor of Science
Ritsumeikan University

April 2013 – March 2013

April 2011 – March 2013

Shiga, Japan

April 2007 – March 2011

Shiga, Japan

WORK EXPERIENCE

Postdoctoral Researcher (University Assistant)

Graz University of Technology

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 2022 - Present

Styria, Austria

October 2018 – September 2022

Styria, Austria

Stylla, Austila

April 2021 – Present 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 - P33634 Co-Investigator (January 2021–December 2024) Ritsumeikan Global Innovation Research Organization (R-GIRO) - An Interdisciplinary Research Center on

Supporting Cognitive and Communication for Elderly Project Member (April 2021–March 2026)

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

IPC member / DC co-chair / We co-chair / Demo co-chair IEEE VR (2019–2023), IEEE ISMAR (2020–2023), 3DWeb (2020), ICAT-EGVE (2017) / IEEE ISMAR (2020, 2023) / IEEE VR (2019) / IEEE ISMAR (2018)

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) (2016–2019), TrakMark (Benchmark test schemes for AR/MR geometric registration and tracking methods) (2015, 2016)

Peer-review (Journal) IEEE TVCG (2018, 2020–2023), IEEE CG&A (2020), IEEE TIM (2020), IEEE TOM (2016, 2021, 2022), Frontiers in Virtual Reality (2021), etc.

Peer-review (Conference) IEEE VR (2018–2023), IEEE ISMAR (2017–2023), ACM CHI (2020, 2023), IEEE InfoVis (2020), ACM VRST (2019), AH (2019), ICAT-EGVE (2017, 2019), ACM 3DWeb (2020), APMAR (2018, 2019), etc.

[&]quot;Augmented Reality," TUGraz, in collab. w/D. Kalkofen (WS18–21) | P. Roth (WS18 & 19) | A. Plopski (WS22 & 23)

[&]quot;Research Seminar - Virtual Reality," TUGraz (WS22-23)

[&]quot;Virtual Reality," TUGraz, in collab. w/D. Schmalstieg (SS22)

[&]quot;Biomedical Visualization | AK Computergraphics," TUGraz, in collab. w/D. Kalkofen (WS22 & 23)

[&]quot;Realtime Visualisation," FHSalzburg, in collab. w/M. Tatzgern (WS20 – 23)

[&]quot;Experiments in Media Technology - Virtual/Mixed Reality," Ritsumeikan University, TA (2011, 2012)

Languages: Japanese (Native), English (TOEIC: 830), German (Novice) **Programming**: C++, OpenGL/GLSL, Python, PyTorch, C# (Unity), R

National Examination: Applied Information Technology Engineer, Fundamental Information Technology Engineer

AWARDS AND SCHOLARSHIPS

Best Paper / Demo / Presentation / Reading Group Award: IEEE ISMAR (2021, 2023), IEEE VR (2022), IIEEJ (2022), JSCAS (2022), IEEE Workshop KELVAR (2020) / IEEE ISMAR (2015) / KJMR (2014, 2015) / ICVSS (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)

10 SELECTED PUBLICATIONS (FULL LIST: MY PERSONAL WEBSITE)

- 1. Reina Ishikawa, Hideo Saito, Denis Kalkofen, and Shohei Mori, Multi-layer Scene Representation from Composed Focal Stacks, IEEE Trans. on Visualisation and Computer Graphics (TVCG), Special Issue IEEE ISMAR, Vol. 29, Issue 11, pp. 4719–4729 (2023.11) **Q** Best Journal Paper Award
- 2. Shohei Mori, Dieter Schmalstieg, and Denis Kalkofen, Exemplar-Based Inpainting for 6DOF Virtual Reality Photos, IEEE Trans. on Visualisation and Computer Graphics (TVCG), Special Issue IEEE ISMAR, Vol. 29, Issue 11, pp. 4644–4654 (2023.10) **Q** Best Journal Paper Award Nominee
- 3. <u>Shohei Mori</u>, Dieter Schmalstieg, and Denis Kalkofen, *Good Keyframes to Inpaint*, IEEE Trans. on Visualisation and Computer Graphics (TVCG), Vol. 29, Issue 9, pp. 3989–4000 (2022.5) **⊘ Invited TVCG Paper at IEEE ISMAR** 2022
- 4. Christoph Ebner, Shohei Mori, Peter Mohr, Yifan Peng, Dieter Schmalstieg, Gordon Wetzstein, and Denis Kalkofen, Video See-Through Mixed Reality with Focus Cues, IEEE Trans. on Visualisation and Computer Graphics (TVCG), Special Issue IEEE VR (2022.3) **Q** Best Journal Paper Award
- 5. <u>Shohei Mori</u>, Yuta Kataoka, and Satoshi Hashiguchi, *Exploring Pseudo-Weight in Augmented Reality Extended Displays*, Proc. IEEE Virtual Reality (2022.3)
- 6. 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, Proc. IEEE Symp. on Mixed and Augmented Reality (ISMAR) (2021.10) **Q** Best Conference Paper Award
- 7. 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) Invited TVCG Paper at IEEE ISMAR 2020
- 8. 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)
- 9. Peter Mohr-Ziak, <u>Shohei Mori</u>, 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)
- 10. <u>Shohei Mori</u>, 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)

TUTORIALS

Shohei Mori and Richard Skarbez, A Beginner's Guide to Neural Rendering, IEEE ISMAR 2023 (2023.10.20)

Denis Kalkofen, <u>Shohei Mori</u>, and Markus Tatzgern, *Rendering and Visualization in Mixed Reality*, Eurographics 2021 (2021.5.4)

Shohei Mori, Diminished Reality Tutorial, IEEE ISMAR 2014 (2014.9.9)

INVITED TALKS

Shohei Mori, How Far Can We Go for Diminished Reality Without Neural Networks?, Workshop on Inpainting techniques for Object Removal in Indoor Scenes (IEEE ISMAR 2022 Workshop) (2022.10.21), etc.

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)