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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Education

Doctor of Engineering — Apr. 2013 – Mar. 2016
Graduate School of Information Science and Engineering, Ritsumeikan University — Shiga, Japan

Master of Engineering — Apr. 2011 – Mar. 2013
Graduate School of Information Science and Engineering, Ritsumeikan University — Shiga, Japan

Bachelor of Science — Apr. 2007 – Mar. 2011
Ritsumeikan University — Shiga, Japan

Work Experience

Postdoctoral Researcher (University Assistant) — Oct, 2022 – Present
Graz University of Technology — Styria, Austria

Postdoctoral Researcher (University Project Assistant) — Oct. 2018 – Sep. 2022
Graz University of Technology — Styria, Austria

Guest Lecturer (Global) — Apr. 2021 – Mar. 2024
Keio University — Kanagawa, Japan

Guest Researcher (University Project Assistant) — Aug. 2017 – Sep. 2018
Graz University of Technology — Styria, Austria

Visiting Researcher (JSPS PD) — Apr. 2016 – Sep. 2018
Keio University — Kanagawa, Japan

Research Fellow (JSPS DC-1) — Apr. 2013 – Mar. 2016
Ritsumeikan University — Shiga, Japan

Teaching

"Augmented Reality," TUGraz, in collab. w/ D. Kalkofen (WS18–21) | P. Roth (WS18 & 19) | A. Plopski (WS22 & 23)
"Virtual Reality," TUGraz, in collab. w/ D. Schmalstieg (SS22) | C. Arth (SS23 & 24)
"Research Seminar - Virtual Reality," TUGraz (WS22–SS24)
"Biomedical Visualization | **AK Computergraphics,"** TUGraz, in collab. w/ D. Kalkofen (WS22 & 23)
"Realtime Visualisation," FHSalzburg, in collab. w/ M. Tatzgern (WS20 – 23)

Projects

Ritsumeikan Int. Collaborative Research Promotion Program (Startup) - Immersive 3D Spatial Editing for Large Workspace with a Stretchable Stylus and a Hand-held Canvas Counterpart PI (04.2024 – 03.2025)
FWF - Real-time Three-dimensional Diminished Reality - P33634 Co-Investigator (01.2021–12.2024)
R-GIRO) - An Interdisciplinary Research Center on Supporting Cognitive and Communication for Elderly Project Member (04.2021–03.2026)
Grant-in-Aid for Young Scientists (B) - 17K12729 Principal Investigator (04.2017–09.2018)
Grant-in-Aid for JSPS Fellows (DC-1) - 13J09193 (04.2013–03.2016) **(PD) 16J05114** Research Fellow (04.2016–09.2018)
Grant-in-Aid for Scientific Research (S) - 24220004 Research Collaborator (05.2012–03.2017)

Service

IPC member IEEE VR (2019–2024), IEEE ISMAR (2020–2024), 3DWeb (2020), ICAT-EGVE (2017) | **DC co-chair** IEEE ISMAR (2020, 2023) | **Web co-chair** IEEE VR (2019) | **Demo co-chair** IEEE ISMAR (2018) | **DC mentor** IEEE VR (2024) | **Academic Journal Committee** The Virtual Reality Society of Japan (2020 – 2024) | **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.

SKILLS

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 Univ. KENKYU-SHOREI Scholarship S, Prize Fellowship for the Doctoral Degree Students (For the JSPS DC1/DC2 achievers) (2013–2016) / 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) **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) **Best Journal Paper Award Nominee**
3. Shohei Mori, 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) **Best Journal Paper Award**
5. Shohei Mori, 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) **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, Shohei Mori, 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, 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)
10. 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)

TUTORIALS

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

Denis Kalkofen, Shohei Mori, and Markus Tatzgern, *Rendering and Visualization in Mixed Reality*, EG 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)

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)