SHOHEI MORI, D.Eng

Junior Research Group Leader, VISUS & EXC IntCDC, Uni Stuttgart
Guest Associate Professor (Global), 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 Science and Engineering, Ritsumeikan University — Shiga, Japan

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

WORK EXPERIENCE

Junior Research Group Leader (Lead of Mediated Reality Group) — Sep. 2024 – Present
Funded by Alexander von Humboldt Foundation & EXC IntCDC, VISUS, Uni Stuttgart — Germany

Guest Associate Professor (Global) — Apr. 2024 – Present
Keio University — Japan

University Assistant, Postdoctoral Researcher — Oct. 2022 – Aug. 2024
ICG, Graz University of Technology — Austria

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

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

Guest Researcher — Aug. 2017 – Sep. 2018
ICG, Graz University of Technology — Austria

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

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

TEACHING

"Advanced Seminar - Image-Based & Neural Rendering," UniStuttgart (WS24 & 25)
"Real-Time Graphics," UniStuttgart, in collab. w/ D. Schmalstieg (SS25)
"Virtual Reality," TUGraz, in collab. w/ D. Schmalstieg (SS22) | C. Arth (SS23 & 24)
"Augmented Reality," TUGraz, in collab. w/ D. Kalkofen (WS18–21) | P. Roth (WS18 & 19) | A. Plopski (WS22 & 23)
"Research Seminar - Virtual Reality," TUGraz (WS22–SS24)
"Realtime Visualisation," FHSalzburg, in collab. w/ M. Tatzgern (WS20 – 23)
"Mixed Reality Technologies," FHSalzburg, in collab. w/ M. Tatzgern (SS25)

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)
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

Program Co-chair IEEE VR (2026) | **Assoc. Program Co-chair** IEEE ISMAR (2025) | **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 (A2-level)
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. Ayaka Yasunaga, Hideo Saito, Dieter Schmalstieg, and Shohei Mori, *IntelliCap: Intelligent Guidance for Consistent View Sampling*, Proc. IEEE Int. Symp. on Mixed and Augmented Reality (ISMAR) (2025.10) *To Appear*
2. Ke Li, Mana Masuda, Susanne Schmidt, and Shohei Mori, *Radiance Fields in XR: A Survey on How Radiance Fields are Envisioned and Addressed for XR Research*, IEEE Trans. on Visualisation and Computer Graphics (TVCG), Special Issue IEEE ISMAR (2025.10) *To Appear*
3. Satoshi Hashiguchi, Yuta Kataoka, Asako Kimura, and Shohei Mori, *Perceived Weight of Mediated Reality Sticks*, IEEE Trans. on Visualisation and Computer Graphics (TVCG) (2025.X) *In Press*
4. Ayaka Yasunaga, Hideo Saito, and Shohei Mori, *User-in-the-Loop View Sampling with Error Peaking Visualization*, Proc. IEEE Int. Conf. on Image Processing (ICIP) (2025.9) *To Appear*
5. Kenta Horikawa, Mariko Isogawa, Hideo Saito, and Shohei Mori, *Dense Depth from Event Focal Stack*, Proc. IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) (2025.2)
6. 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**
7. 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**
8. 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**
9. 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**
10. 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**

TUTORIALS

Shohei Mori, Ke Li, and Mana Masuda, *A Practical Guide to Radiance Fields for XR Research and Applications*, IEEE VR 2025 (2025.3.8)

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, *XR Meets Radiance Fields*, EURASIP Summer School XRTX 2025 (2025.7.8)

Shohei Mori, *Realityshop: World Through Mediated Reality*, Asia-Pacific Workshop on Mixed and Augmented Reality (APMAR) (2024.11.30)

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)