

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
w/ Alexander von Humboldt Prof. & Cluster of Excellence IntCDC, VISUS, Uni Stuttgart	Germany
Guest Associate Professor (Global)	Apr. 2024 – Presenť
Keio University	Japan
University Assistant, Postdoctoral Researcher	Oct. 2022 – Aug. 2024

Austria

Austria

Japan

Austria

Japan

Japan

Oct. 2018 – Sep. 2022

Apr. 2021 - Mar. 2024

Aug. 2017 – Sep. 2018

Apr. 2016 – Sep. 2018

Apr. 2013 – Mar. 2016

ICG, Graz University of Technology University Project Assistant, Postdoctoral Researcher

ICG, Graz University of Technology

Guest Lecturer (Global) Keio University

Guest Researcher ICG, Graz University of Technology

Visiting Researcher (JSPS PD)

Keio University

Research Fellow (JSPS DC-1)

Ritsumeikan University

TEACHING

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

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.

[&]quot;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)

[&]quot;Research Seminar - Virtual Reality," TUGraz (WS22–SS24)

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

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

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. Satoshi Hashiguchi, Yuta Kataoka, Asako Kimura, and <u>Shohei Mori</u>, *Perceived Weight of Mediated Reality Sticks*, IEEE Trans. on Visualisation and Computer Graphics (TVCG) (2025.X)
- 2. 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)
- 3. Kenta Horikawa, Mariko Isogawa, Hideo Saito, and <u>Shohei Mori</u>, *Dense Depth from Event Focal Stack*, Proc. IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) (2025.2)
- 4. 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**
- 5. 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
- 6. <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
- 7. 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
- 8. 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
- 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, 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)