

OVERVIEW

I am an early-career researcher in Human-Computer Interaction (HCI) and an Adjunct Researcher with the Embodied Visualisation (EmVis) Research Group at Monash University. My research lies at the intersection of human-centred AI, spatial computing, immersive analytics, and digital health, where I design intelligent interactive systems that enhance decision-making, collaboration, and learning. Rather than developing AI algorithms, I investigate how emerging AI technologies can be integrated into immersive interfaces through human-centred design, enabling transparent and trustworthy human-AI collaboration. Working closely with clinicians, healthcare educators, and interdisciplinary researchers, I develop and evaluate technologies that address real-world healthcare challenges. My long-term vision is to advance human-centred spatial AI that bridges artificial intelligence and human expertise to improve healthcare delivery and digital care.

RESEARCH POSITIONS

Monash University

2025–2026 Lecturer (Teaching & Research)
2023–2025 Assistant Lecturer (Teaching & Research Fellow)

EDUCATION

Monash University

Doctor of Philosophy, Computer Science
2019 – 2023

Monash University

Master of Information Technology
2017 – 2018

University of New South Wales

Bachelor of Science, Computer Science
2010 - 2013

RESEARCH EXPERTISE

- Human-centred AI
- Spatial computing (XR)
- Human-computer interaction
- Digital health
- Immersive analytics
- Information visualisation

RESEARCH HIGHLIGHTS

- 14 peer-reviewed publications
- Best Paper Nomination, IEEE VR 2020
- Publications at CHI, VR, ISMAR, PACMHCI and IHCS
- Chief Investigator on 3 competitive research grants
- Research funding exceeding AUD \$74k as CI/Co-CI
- Supervised or co-supervised 15 research students

SELECTED PUBLICATIONS

Design and Evaluation of Interactive Small Multiples Data Visualisation in Immersive Spaces. [Jiazhou Liu](#), Arnaud Prouzeau, Barrett Ens, and Tim Dwyer. IEEE VR 2020 (A* Conference) [**Best Paper Nomination**]

Effects of Display Layout on Spatial Memory for Immersive Environments. [Jiazhou Liu](#), Arnaud Prouzeau, Barrett Ens, and Tim Dwyer. PACMHCI (Q1 Journal, ACM ISS 2022)

DataDancing: An Exploration of the Design Space for Visualisation View Management for 3D Surfaces and Spaces. [Jiazhou Liu](#), Barrett Ens, Arnaud Prouzeau, Jim Smiley, Isobel Nixon, Sarah Goodwin, and Tim Dwyer. ACM CHI 2023 (A* Conference)

Investigating the Effects of Physical Landmarks on Spatial Memory for Information Visualisation in Augmented Reality. [Jiazhou Liu](#), Kadek Satriadi, Barrett Ens, and Tim Dwyer. IEEE ISMAR 2024 (A* Conference)



ACADEMIC SERVICES

Conference Committee

- IEEE VR Workshop Chair (2027)
- iiWAS/MoMM PC Member (2025)
- ACM ISS Web Chair (2024)
- IEEE ISMAR Web Chair (2023)

Paper Reviewer

- ACM CHI 2020, 2023, 2024, 2025, 2026
- IEEE VR 2021, 2025, 2026, VRST 2026
- IEEE ISMAR 2025, 2026
- ACM SUI 2026, TVCG 2026
- IEEE VIS 2024, PacificVis 2026
- ACM ISS 2021, 2022

Workshop Organiser

- IEEE VIS 2025
- ACM CHI 2022

TALKS & MEDIA COVERAGE

Interview

- HandovAR Project Featuring, Jun 2026
- Monash Open Day, Aug 2024 & Aug 2023

Conference Presentation

- IEEE ISMAR 2024
- ACM CHI 2023
- MEL-CHI 2023
- ACM ISS 2022
- IEEE VR 2020

Guest Lecturer/Presentation

- Monash Children's Hospital 2025
- Monash Take CTRL 2021
- Monash Data Visualisation unit 2021, 2022

REFERENCES AVAILABLE UPON REQUEST

SELECTED EMERGING RESEARCH

AR-Facilitated Safety Inspection and Fall Hazard Detection on Construction Sites. [Jiazhou Liu](#), Aravinda S. Rao, Fucai Ke, Tim Dwyer, Benjamin Tag, Pari Delir Haghighi. IEEE ISMAR 2024 (A* Conference)

SAMMed-VR: Integrated Segment Anything Model in Virtual Reality for Supervised Brain Tumour Segmentation. Vahid Pooryousef, Himashi Peiris, Huiyi Liang, Ang Li, Zhaolin Chen, Tim Dwyer, [Jiazhou Liu](#). IEEE VIS 2025 (A* Conference)

HandovAR: Towards AR and AI Support for ICU Nurse Handover. Mengxing Li, Phoebe Zhang, [Jiazhou Liu](#), Agnes Haryanto, Kadek Ananta Satriadi, Trung Nguyen, Deval Mehta, Zerina Lokmic-Tomkins, Tim Dwyer. ACM CHI 2026 (A* Conference)

RESEARCH GRANTS & PROJECTS

Real-time EH&S Intervention to Improve Site Safety. *Building 4.0 CRC Grant, #29 project.* AUD\$853,333. 2023-2025. Pari Delir Haghighi (Lead CI), Tim Dwyer, Hamid Rezaatofighi, Teresa Wang, [Jiazhou Liu \(RF\)](#).

AI-facilitated Brain Tumour Segmentation in Immersive Environments. *Monash FIT Seed Grant.* AUD\$35,000. 2024-2025. [Jiazhou Liu \(CI\)](#), Himashi Peiris, Zhaolin Chen, Tim Dwyer.

SafePhARm: Safe and Efficient Pharmacy Practice Through Augmented Reality. *EmVis Seed Grant.* AUD\$3,000. 2025-present. Agnes Haryanto, [Jiazhou Liu \(co-CI\)](#).

HandovAR: AI-facilitated AR Handover System for ICU Nurses. *Monash FIT Seed Grant.* AUD\$30,000. 2025-present. [Jiazhou Liu \(CI\)](#), Kadek Satriadi, Agnes Haryanto, Deval Mehta, Tim Dwyer.

