



RESEARCH INTERESTS

I am a Lecturer and researcher in the Embodied Visualisation (EmVis) Research Group at Monash University and an early-career researcher in Human-Computer Interaction (HCI). My research sits at the intersection of embodied interaction, immersive technologies, spatial cognition, and human-centred artificial intelligence (AI).

My work investigates how people interact with intelligent systems and emerging technologies, with a particular focus on understanding human behaviour, designing effective interaction techniques, and evaluating user experiences in complex environments. I develop and study immersive and embodied interfaces that leverage virtual and augmented reality, gesture interaction, and AI-assisted technologies to support human learning, decision-making, and collaboration.

Through interdisciplinary research spanning healthcare, education, simulation-based training, and smart manufacturing, I design and evaluate human-centred interactive systems that facilitate effective collaboration between people and intelligent agents. My long-term research goal is to advance human-centred approaches to intelligent and embodied technologies, enabling more natural, effective, and trustworthy interactions between humans and increasingly autonomous systems.

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 INTERESTS

- Human-Computer Interaction
- Embodied Interaction
- Human-Centred AI
- Virtual and Augmented Reality
- Intelligent Interactive Systems
- Digital Health

RESEARCH PAPERS (SELECTED)

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

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

Ang Li, Jiazhou Liu, Maxime Cordeil, Jack Topliss, Thammathip Piumsomboon, and Barrett Ens, [GestureExplorer: Immersive Visualisation and Exploration of Gesture Data](#). 2023 ACM CHI Conference on Human Factors in Computing Systems (ACM CHI 2023)



GRANTS, AWARDS & SCHOLARSHIPS

ECA Seed Grants

Monash Faculty of Information Technology
2024 - 2025 and 2025 - 2026

Postgraduate Publication Award

Monash Graduate Research
2023

Graduate Research Completion Award

Monash Graduate Research
2022

Australian Research Training Program Scholarship

Australian Department of Education
2019 - 2022

Information Technology Postgraduate Scholarship

Monash University
2018 - 2019

ACADEMIC SERVICES

Conference Committee

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

Paper Reviewer

ACM CHI 2020 (LBW), 2023, 2024, 2025, 2026
IEEE ISMAR 2025, 2026
IEEE VR 2021, 2025, 2026
IEEE VIS 2024, PacificVis 2026
ACM ISS 2021, 2022
TVCG 2026

Workshop Organiser

IEEE VIS 2025
ACM CHI 2022
Monash Take CTRL 2021

RESEARCH PAPERS (CONT.)

Jia Zhou Liu, Arnaud Prouzeau, Barrett Ens, and Tim Dwyer, [Effects of Display Layout on Spatial Memory for Immersive Environments](#). 2022 ACM Interactive Surfaces and Spaces Conference (ACM ISS 2022)

Rhys Newbury, Kadek Ananta Satriadi, Jesse Bolton, Jia Zhou Liu, Maxime Cordeil, Arnaud Prouzeau, and Bernhard Jenny. [Embodied Gesture Interaction for Immersive Maps](#). 2021 Cartography and Geographic Information Science (CGIS '21)

Jia Zhou Liu, Arnaud Prouzeau, Barrett Ens, and Tim Dwyer. [Design and Evaluation of Interactive Small Multiples Data Visualisation in Immersive Spaces](#). 2020 IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR '20) [Best Paper Nomination]

DEMONSTRATION, POSTERS, AND WORKSHOP PAPERS

Mengxing Li, Phoebe Zhang, Jia Zhou Liu, et al. [HandovAR: Towards AR and AI Support for ICU Nurse Handover](#). 2026 ACM CHI Conference on Human Factors in Computing Systems (ACM CHI 2026) | XR for Challenging Environments Workshop

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

Jia Zhou Liu, Aravinda S. Rao, Fucui Ke, Tim Dwyer, Benjamin Tag, Pari Delir Haghighi. [AR-Facilitated Safety Inspection and Fall Hazard Detection on Construction Sites](#). 2024 IEEE International Symposium on Mixed and Augmented Reality.

JIAZHOU 'JOE' LIU

liuji Zhou@gmail.com



[Personal Website](#)



Lecturer

TALKS & PRESENTATIONS

Conference Presentation

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

Workshop Presentation

IEEE ISMAR 2024 - SafeAR
Monash Take CTRL 2021

Guest Lecturer/Presentation

Monash Children's Hospital 2025
Monash FIT3179 Data Visualisation 2021, 2022

TECHNICAL SKILLS

Proficient

Kotlin, JavaScript, Java, Swift, Swift UI, C#, Unity, Tableau, R, Vega-lite, D3, HTML, CSS, Adobe software, Python, AngularJS, NodeJS, SQL, Git

Familiar

C, SharePoint, VUE, Flutter

REFERENCES

Prof. Tim Dwyer

Performance Supervisor - Monash
Email: tim.dwyer@monash.edu

A/Prof. Bernhard Jenny

Teaching Unit Chief Examiner - Monash
Email: Bernie.Jenny@monash.edu

Dr Pari Delir Haghighi

Building CRC 4.0 Project Leader - Monash
Email: Pari.Delir.Haghighi@monash.edu

TEACHING ACTIVITIES

University of Melbourne

- COMP90044 Research Methods (**Tutor**) [2024]

Monash University

- [FIT2095 Full stack development](#) (**Chief Examiner, Lecturer**) [2024 - 2026]
- [FIT2081 Mobile Application Development](#) (**Lecturer**) [2024 - 2026]
- [FIT1050 Web Fundamentals](#) (**Lecturer**) [2024]
- [FIT3179 Data Visualisation](#) (**Lecturer/Head Tutor**) [2020 - 2025]
- [FIT316X Computer Science Project](#) (**Supervisor**) [2019, 2021 - 2022]
- [FIT5147 Data Exploration and Visualisation](#) (**Tutor**) [2022]
- [FIT3175 Usability](#) (**Tutor**) [2022]
- [FIT5152 User Interface Design and Usability](#) (**Tutor**) [2021]

INDUSTRY EXPERIENCE

IT Support Subject Matter Expert (SME)

Monash University, Clayton, VIC
2021 - 2023

SharePoint Consultant/Front-end Developer (Full-time)

WebVine, Redfern, NSW
2015 - 2016

Website Developer & Administrator (Full-time)

HBC International, Auburn, NSW
2015

Network Technician (Full-time)

HBC International, Auburn, NSW
2014 - 2015

