

Tinghui Li

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EDUCATION

University of Sydney

Doctor of Philosophy

Sydney, Australia

10/2023 – 03/2027

- **Supervisors:** Dr. Zhanna Sarsenbayeva, A/Prof. Anusha Withana, Prof. Eduardo Velloso
- **Research Area:** Human-Computer Interaction, Extended Reality, Accessibility
- **Project Topic:** Understanding and Modelling the Effects of Situational Impairments in Extended Reality
- **Scholarships:** Full Tuition Fee Scholarship, Full Stipend Scholarship

University of Sydney

Bachelor of Advanced Studies (Honours)

Sydney, Australia

09/2022 – 09/2023

- **Major:** Computer Science (First-Class Honours)
- **Supervisor:** A/Prof. Anusha Withana
- **Project Topic:** Physics Inspired Time-Agnostic Graph Neural Network for Finger Motion Prediction

University of Sydney

Bachelor of Science

Sydney, Australia

02/2020 – 09/2022

- **Majors:** Data Science, Biochemistry and Molecular Biology
- **Courses:** Human-in-the-Loop Data Analytics (91/100); Pervasive Computing (91/100); Introduction to Programming (89/100); Visual Analytics (88/100); Usability Engineering (82/100).

EXPERIENCE

School of Information Technology, University of Sydney

Casual Academic – Computer Science

Sydney, Australia

06/2023 – Present

- INFO3315 Human-Computer Interaction Teaching Assistant and Tutor
- COMP4427/5427 Usability Engineering Teaching Assistant and Tutor
- COMP5703/DATA5703/CSEC5703 Group-Based Capstone Project Tutor and Client

Graduate School of Media Design, Keio University

Visiting Researcher

Tokyo, Japan

04/2025 – 05/2025

- **Supervisor:** Prof. Kouta Minamizawa, Assist. Prof. Giulia Barbareschi
- **Project Topic:** Estimating the Effects of Noise on Mixed Reality Interaction

Bosch (China) Investment Co., Ltd.

Data Scientist Intern

Shanghai, China

11/2021 – 01/2022

- Responsible for daily data transmission, data cleaning and data proofreading;
- Analyzed the abnormal vehicles data, including finding the abnormal cells, plotting current and voltage graphs, and finding the difference between normal and abnormal vehicles;
- Participated in the production and improvement of the PowerBI dashboard.

University College London

Exchange Summer School

London, England

07/2021 – 08/2021

- **Courses:** Health Data Science and Data Analytics in Healthcare.

Shanghai Jiao Tong University

Exchange Summer School

Shanghai, China

12/2020 – 01/2021

- **Courses:** Algorithms and Analysis (89/100); Statistics of Stochastic Processes (89/100).

Faculty of Science, University of Sydney

Peer Mentor

Sydney, Australia

12/2020 – 06/2021

PUBLICATIONS

- [CHI'25 Honorable Mention] **Tinghui Li**, Eduardo Velloso, Anusha Withana, and Zhanna Sarsenbayeva (2025). Estimating the Effects of Encumbrance and Walking on Mixed Reality Interaction. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems 2025 (CHI'25, **CORE A***).
- [arXiv] **Tinghui Li**, Pamuditha Somarathne, Zhanna Sarsenbayeva, and Anusha Withana. TA-GNN: Physics Inspired Time-Agnostic Graph Neural Network for Finger Motion Prediction. arXiv Preprints 2025.
- [Under Review] **Tinghui Li**, Eduardo Velloso, Anusha Withana, and Zhanna Sarsenbayeva. WICE: A Model to Quantify Arm Fatigue when Carrying Objects across Different Arm Locations.
- [Under Review] **Tinghui Li**, Danyang Peng, Eduardo Velloso, Anusha Withana, Kouta Minamizawa, and Zhanna Sarsenbayeva. Estimating the Effects of Ambient Noise on Mixed Reality Interaction.
- [Under Review] **Tinghui Li**, Brandon Victor Syiem, Niels van Berkel, Anusha Withana, and Zhanna Sarsenbayeva. Trends and Directions of Extended Reality Research in HCI: A Co-Word Analysis.
- [Under Review] **Tinghui Li**, Pamuditha Somarathne, Zhanna Sarsenbayeva, and Anusha Withana. NeverLagging: Enhancing Virtual Reality Finger Tracking with Physics-Inspired Time-Agnostic GNN.
- [Under Review] Yingqi Wang, **Tinghui Li**, and Zhanna Sarsenbayeva. Exploring Virtual Reality Interaction in Confined Spaces: A Third-Person Perspective Solution.
- [Ongoing] **Tinghui Li**, Vittoria Salim, and Zhanna Sarsenbayeva. Optimizing VR Safety in Confined Spaces with AI Driven Small Objects Boundary System.
- [Ongoing] Ruilin Liu, **Tinghui Li**, and Zhanna Sarsenbayeva. Estimating the Effects of Ambient Light on Mixed Reality Interaction.

AWARDS

- 2025 University of Sydney CS HDR Research Support Fund (A\$5,000)
- 2023 – 2027 University of Sydney Faculty of Engineering Research Stipend Scholarship (A\$40,109 p.a.)
- 2023 – 2027 University of Sydney International Tuition Fee Scholarship
- 2023 University of Sydney Engineering Vacation Research Internship Program Scholarship (A\$3,000)
- 2023 University of Sydney Undergraduate High Honour Roll
- 2022 University of Sydney Undergraduate Coursework and Top 3rd Year High Honour Roll
- 2021 University of Sydney Global Citizenship Award

ACTIVITIES

- [Reviewer] The ACM CHI conference on Human Factors in Computing Systems (CHI '25)
- [Reviewer] 36th Australian Conference on Human-Computer Interaction (OzCHI '24)
- [Reviewer] The Augmented Humans (AHs) International Conference (AHs '24)
- [Student Volunteer] 22nd IEEE International Symposium on Mixed and Augmented Reality (ISMAR '23)
- [Student Volunteer] 48th International Conference on Very Large Databases (VLDB '22)

SKILLS

Technical Skills

- Proficient in using Python, R, C#, SQL, LaTeX, Unity, Oculus, Figma, Tableau, and PowerBI.
- Know about Blender, C/C++, and MATLAB.

Languages

- Mandarin (Native Speaker)
- English (Proficient, IELTS 6.5, Writing 7.0)