Ada Zhao

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Research Interest

I am a Human–Computer Interaction researcher focused on advancing how computers support people during real-world physical activities through embedded assistance. My current work explores this space by integrating computer vision, large language models, and augmented reality.

Education

University of Colorado Boulder   2025-Present
Ph.D. in Computer Science
Advisors: Ellen Yi-Luen Do, Ryo Suzuki
Human-Computer Interaction, AR/VR

University of Colorado Boulder   2023-2025
M.S. in Creative Technology and Design
GPA: 3.97/4.0

New York University Shanghai   2014-2018
B.S. in Interactive Media Arts, Computer Science
GPA: 3.87/4.0, magna cum laude

Research Experience

ATLAS Institute, Boulder   08/2023-Present
Research Assistant, Advisors: Ellen Yi-Luen Do, Ryo Suzuki

· Investigated how embedded visual guidance can support users in performing physical tasks, and developed an AR system that automatically generates spatial visual cues from natural-language instructions. *[C1]*

· Developed an authoring tool to create AR tutorials by automatically identifying key task steps through speech-action synchronicity analysis. *[P2]*

NYU Shanghai, Shanghai   09/2017-06/2018
Research Assistant, Advisor: Michael Naimark

· Researched the *TeleWindow* project, a system to capture and display telepresence for one-to-one conferencing. This work resulted in an approved patent.

Publications

*C stands for conference full paper, P stands for posters or patent.

[C2] Rishi Vankuru, Krithik Ranjan, **Ada Yi Zhao**, David Lindero, Gunilla H Berndtsson, Gregoire Phillips, Amy Banić, Mark D Gross, Ellen Yi-Luen Do. Studying Mobile Spatial Collaboration across Video Calls and Augmented Reality. In Proceedings of Computer-Supported Cooperative Work & Social Computing. ACM, 2026. (conditionally accepted to CSCW, acceptance rate: 6.8%)

[C1] **Ada Yi Zhao**, Aditya Gunturu, Ryo Suzuki, Ellen Yi-Luen Do. Guided Reality: Generating Visually-Enriched AR Physical Task Guidance with LLMs and Vision Models. In Proceedings of the Annual ACM Symposium on User Interface Software and Technology. ACM, 2025. (UIST'25 acceptance rate: 22.1%)

[P2] **Ada Yi Zhao**, Suibi Che-Chuan Weng, Ella Grace Finstuen, Haifeng Chen, Lu-An Tang, Kai Ishikawa, Ellen Yi-Luen Do. The WizARd and Apprentice: An Augmented Reality Expert Capture System. In Proceedings of International Symposium on Mixed and Augmented Reality. IEEE, 2024. (ISMAR-Adjunct)

[P1] Michael Naimark, Cameron Ballard, Bruce Luo, David Santiano, Grace Huang, Mateo Juvera Molina, and **Ada Zhao**. Systems and methods for interpolative three-dimensional imaging within the viewing zone of a display. U.S. Patent 17/604,333, 2024

Professional Experience

Tencent, Shanghai   06/2018-05/2023
Senior Product Manager, Mobile AR Selfie Lenses and Video Editing Tools

· Managed the development, production, and promotion plan, contributing an extra 10% of user-generated content to our short video platform. Monthly campaigns achieve over 10 million user visits.

· Worked closely with AI engineers and designers to develop and apply cutting-edge technology to mobile AR selfie lenses and video editing.

Midnight Commercial Studio, New York   05/2017-08/2017
Research & Development Summer Intern

· Participated in designing and developing client projects, including Samsung smart fridge prototype, Cadillac rearview mirror installation, and Patron tequila mobile AR experience.

Awards and Honors

CU Boulder CS PhD Scholarship $5,000   2025
CU Boulder ATLAS Scholarship $4,000   2023, 2024
Tencent Outstanding Employee (top 5%)   2019, 2020
Tencent Innovation Award   2020, 2021
NYU Dean's List   2015-2018

Teaching Experience

CSCI 1300 Starting Computing   08/2025-Present
ATLS 3000 Object (Physical Computing)   08/2024-12/2024
ATLS 5616 Intro to Virtual Reality   08/2023-12/2023
VR/AR Fundamentals   08/2017-05/2018
Interaction Lab   08/2015-05/2016

Leadership and Service

HackShanghai, Largest College Hackathon in China, Co-director   05/2015-11/2015

Skills

Unity, Web Dev, Python, Swift, Java
Arduino, Physical Computing, Digital Fabrication
Project Management, UX Design, Data Analysis
Adobe Creative Suite, Microsoft Office Suite