

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

Ph.D. in Computer Science

Advisors: Ellen Yi-Luen Do, Ryo Suzuki

Human-Computer Interaction, AR/VR

2025-Present

University of Colorado Boulder

M.S. in Creative Technology and Design

GPA: 3.97/4.0

2023-2025

New York University Shanghai

B.S. in Interactive Media Arts, Computer Science

GPA: 3.87/4.0, magna cum laude

2014-2018

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