

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
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Skills

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