

Yuchen ZHAO



Digital Media | Human Computer Interaction
AR/VR/XR | Experience Design | Digital Humanity

Atlanta, GA | (470) 240-8949
zhaoyuchen8877@hotmail.com
www.zhaoyuchen.site

EDUCATION

Georgia Tech | Atlanta, US Aug. 2019 – 2025 Summer (Expected)

Advisors | Dr. Jay Bolter GPA | 3.93/4.0

Ph.D. | Digital Media | VR/AR

Dissertation: BioXR: Enhancing Engagement Experience with Biosensing and Immersive Media

- A Case Study in Biofeedback-Driven XR for Enhanced Fitness Experiences (ongoing)

PRIMARY COURSEWORK | Principle of Interaction Design • Media Theory • Cognitive Science

Duke University | Durham, US Aug. 2016 - May. 2018

Advisor | Dr. Maurizio Forte GPA | 3.88/4.0

M.A. | Computational Media | Information Science + Study Certification

Thesis: VR Touch Museum

PRIMARY COURSEWORK | Virtual Museums • Unity 3D Programming • Virtual Reality Research

Tongji University | Shanghai, CN Aug. 2011 - Mar. 2014

Advisor | Dr. Li WANG GPA | 84.96 (Top 2)

M.A. | Art Theory | New Media Art

Thesis: Five Senses Experience in Ritual and New Media Arts

PRIMARY COURSEWORK | Research Method for Art and Design • New Media Art Creation • Visual Effect Production • Visual Communication Theory and Communication

Minzu University of China | Beijing, CN Aug. 2007 - May. 2011

B.A. | Journalism GPA | 3.22/4

Thesis: The Visual Persuasion – A Case Study Based on the 2008 Beijing Olympic Video

PRIMARY COURSEWORK | Introduction of Internet Communication • Webpage Design • Research on New Media • Journalism and Mass Medium

Tübingen University | Tübingen, DE Aug. 2007 - May. 2011

Exchange | Culture Study GPA | N/A

CERTIFICATIONS

Information Science + Study Duke, 2018

PUBLICATIONS

- **[DIS] Zhao, Yuchen**, Jay David Bolter, Kexin Chen, Xuerui Wang, Xintong Jiang, & Zhao Ni. "BioVR: An Exploratory Study of Biofeedback-Driven Adaptive VR for Personalized and Sustained Fitness Intensity". In *ACM Conference on Designing Interactive Systems (DIS)*, 2025 [Acceptance Rate: 30.5%].
- **[JMIR]** Ni, Zhao, Intan Maharani Sulistyawati Batubara, Georges Bediang, Habakkuk Yumo, Xuehong Zhang, Sunyong Oh, **Yuchen Zhao**, and LaRon E. Nelson. "Likelihood of Leveraging Augmented Reality Technology to Promote HIV Prevention and Treatment Among Adolescent Girls and Young Women in Cameroon: Cross-Sectional Survey." *JMIR pediatrics and parenting* 8, no. 1 (2025): e69471.
- **[CHI] Zhao, Yuchen**, Tulika Banerjee, Na Liu, and Jennifer G. Kim. "Grow With Me: Exploring the Integration of Augmented Reality and Health Tracking Technologies to Promote Physical Activity." In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, pp. 1-9. 2024 [Acceptance Rate: 33.88%].
- **[PRESENCE] Zhao, Yuchen.**, Brandy J. Pettijohn, Amanda Y. Wang, Daniel P. Keehn, Angela Dai, Joy Dang, Janet H. Murray (2023). "Exploring Location-based AR Narrative Design for Historic Site," *PRESENCE: Virtual and Augmented Reality*, 30, 167-184.
- **[CHI Play] Zhao, Yuchen.**, Gasque, T. M., Winstead, R. J., Tang, K., Busch, D. J., Dominguez-Mirazo, M., & Murray, J. (2021). Shopping in a Pandemic: A Persuasive Game for COVID-19. In *Extended Abstracts of the 2021 Annual Symposium on CHI Play* (pp. 371-375).
- **[IEEE] Zhao, Yuchen.**, Daniel P. Keehn, Amanda Y. Wang, Jason Jiang, and Janet Murray (2021). "The Pickrick Protests: An Interactive Geo AR Experience." In *2021 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)*, IEEE, 2021.
- **[IEEE] Zhao, Yuchen.**, Forte, M., & Kopper, R. (2018). VR Touch Museum. In *2018 IEEE Conference on Virtual Reality and 3D User Interfaces (VR)* (pp. 741-742). IEEE.

- **Zhao, Yuchen**, (2014). "Awaken the Sense of Smell: From the Role of Smell in Rituals to the Application of Olfactory Mechanism in Artistic Creation," *Art and the Age*, No.560, pp22-26. ISSN 1003-2592
- **Zhao, Yuchen**, (2013). "The Disenchantment of Art," *Art Education Academe*, No.58, pp.70-71, ISSN 1674-9286
- **Zhao, Yuchen**, (2013). "The Disappearance and Reappearance in the Aura of Art: Exploring contemporary art from the angle of the ritual," *Art and the Age*, No.522, pp.31-36, ISSN 1003-2592
- **Zhao, Yuchen**, (2013). "Visual Persuasion - Based on the 2008 Beijing Olympic Games trail," *Tongji Academe*, No.15, pp.417-423. ISBN 978-7-5608-4803-7

PEER REVIEWING

- Journal: PRESENCE (2025)
Topic : AR and Health
- Conference: CHI (2025)
Topic: AR and Physical Activity
- Conference: CHI (2024)
Topic: Self-tracking Data Visualization
- Journal: *Frontiers in Virtual Reality* (2023)
Topic: Storytelling in Virtual Reality

TALKS/PRESENTATIONS

Yuchen Zhao, Tulika Banerjee (2023). "Grow With Me: Exploring the Integration of Augmented Reality and Health Tracking Technologies to Promote Physical Activity", CHI 2024 online.

Yuchen Zhao (2021). "How to design history into New Media – The Pickrick AR Project" invited talk at 2021 George Washington English Graduate Student Association (EGSA) Symposium, online.

Yuchen Zhao (2021). "The Pickrick Protests: An Interactive Geo AR Experience" paper presented at IEEE VR 2021, online.

Yuchen Zhao, Janet Murray (2020). "The Interactive Narrative Design in Pickrick AR Project" invited talk at 2020 Interactive Narrative Design for Complexity Representations (INDCOR), online.

Yuchen Zhao, (2018). "VR Touch Museum" poster presented at IEEE VR 2018, Germany.

Yuchen Zhao, (2018). "The Disenchantment and Nature Recovery of Art: Exploration on Contemporary and Modern Art from the Angle of Ritual" invited talk presented at Reformatting the World: An Interdisciplinary Conference on Technology and the Humanities Conference, York University, Canada.

Yuchen Zhao, (2017). "The five senses in religious ritual and its significance to new media art" invited talk presented at Post-human Network Symposium, Arizona State University, USA.

Yuchen Zhao, (2016). "The five senses in religious ritual and its significant to new media art" invited talk presented at The Tank Workshop hosted by Tongji University and Bern University, China.

EXHIBITIONS

Ryan J Winstead, Yuchen Zhao, Terra Mae Gasque, Andrew J Busch, (2020) "Dino-Store" exhibited at Indiecade Game Jam, online.

Ellen Sebring, (2019) "March 1900" exhibited at Association for Asian Studies (AAS) annual conference in 2019, Colorado, USA.

Raqual Prada, (2019) "Cornered" exhibited at NeMaf: Seoul International New Media Festival, Seoul, Korea. (And more)

RESEARCH EXPERIENCE

Project Lead | Atlanta, GA Oct. 2022 – Jan.2023

Personal Health Informatics class at GT | Dr. Jennifer Kim

PROJECT NAME | "Grow with me – Raising an AR pet with user's health data"

PROJECT AREAS | Interactive AR Experience • Personal Health Informatics • Persuasion technology

Project Manager | Atlanta, GA May 2021 - Aug. 2022

DILAC (Digital Integrative Literal Arts Center) lab at GT | Dr. Janet Murray

PROJECT NAME | "The Pickrick Protest"

PROJECT AREAS | Geo AR Experience • Digital Cultural Heritage • Civil Rights

Research Assistant | Atlanta, GA May 2020 - Aug. 2020

DILAC (Digital Integrative Liberal Arts Center) lab at GT | Dr. Janet Murray

PROJECT NAME | "Dino-Store"

PROJECT AREAS | COVID-19-related Game • Persuasive Game • Discomfort Design

Project Assistant | Durham, NC Feb. 2018 - July 2018

Dept. of Art, Art History & Visual Studies at Duke | Dr. Ellen Sebring

PROJECT NAME | "March on Beijing"

PROJECT AREAS | Digital Humanity • History Visualization • VR Oculus Project

Project Assistant | Durham, NC Sep. 2017 – Jan. 2018

Dept. of Medicine at Duke | Dr. Jennifer Moss

PROJECT NAME | "Residency Game"

PROJECT AREAS | Design a game to train doctor on residency • Motion capture and face capture with Kinect and Unity • VR Hololens Project

Project Assistant | Durham, NC Feb. 2017 – May 2017

Dept. of Art, Art History & Visual Studies at Duke | Dr. Gennifer Weisenfeld

PROJECT NAME | "Imaging Kando"

PROJECT AREAS | Data Visualization • Arc GIS and Omega and Neatline • Interaction Design

Project Assistant | Durham, NC Jan. 2017 – May 2017

Dept. of Art, Art History & Visual Studies at Duke | Dr. Raquel Salvatella De Prada

PROJECT NAME | "Cornered"

PROJECT AREAS | Mapping Projection in a dome • Maya and Isadora • Video Art Installation

TEACHING EXPERIENCE

Introduction to Computational Media (Co-taught) Fall 2019-2023

Georgia Tech | Computational Media | LMC 2700

COURSE DESCRIPTION | Students in this course learn the fundamentals of computer media. This is a required course for all undergraduates majoring in Computational Media. Students are given four primary assignments to learn HTML, CSS, and JS, as well as 3D design using A-Frame, API by creating a chatbot, and interactive design by creating a game. My responsibilities include teaching students how to code,

participating in the assignment and quiz design, grading their work, and providing assistance with their assignments.

In 2023, this class was enhanced by incorporating **Artificial Intelligence (AI)** knowledge. Students are required to understand how to design and code using *ChatGPT*, *Google Bard*, *Github Copilot*, or similar LLM tools. They should also learn how to generate images or game assets using image AI. I have contributed to the entire course design process.

Mixed Reality Design (TA) Spring 2020,2021

Georgia Tech | Computational Media | LMC 4733 / 6340

COURSE DESCRIPTION | This project-based course gives students an opportunity to participate in research in XR (VR and AR combined) for experience design. Students in the course will read and discuss the historical background and technical framework for the immersive book as a space for the representation and communication of ideas. The bulk of the course will be devoted to team projects in building prototypes of the immersive book. The technological focus will be the design possibilities afforded by Immersive Web (WebXR) technologies, including Hubs and A-frame (developed by Mozilla). My job is to teach the technology part (A-frame and Hubs), grade assignment and assist students with their questions.

The Principles of Visual Design (Lecturer) 2024

Georgia Tech | Computational Media | LMC 2720

COURSE DESCRIPTION | This is an introductory, lecture-based course designed to help students develop the ability to organize and present ideas visually with clarity and impact. Through a combination of lectures, hands-on projects, in-class activities, and discussions, students will explore key concepts such as color theory, typography, composition, and layout. This course provides the foundational skills necessary for effective communication across diverse platforms. My role includes developing the syllabus, teaching both theoretical concepts and practical skills in Adobe software, assisting with the creation of assignments and quizzes, grading student work, and offering guidance on their projects.

LEADERSHIP & SERVICE

Entrepreneurship Summer 2024-Present

Startup Founder | BioVR

- Founded BioVR, an innovative startup focused on integrating biofeedback and VR technology to enhance user fitness experiences.
- Led the development of VR-based heart rate monitoring technology, targeting casual fitness enthusiasts and individuals intimidated by traditional gym environments.
- Conducted extensive customer discovery and market analysis, validating product-market fit and identifying key user needs and pain points.
- Managed cross-functional teams across design, development, and user testing phases, ensuring smooth product iterations and optimization for both performance and user engagement.
- Successfully pitched to investors and secured funding through programs like Venture Lab, and CREATE-X.

Graduate Teaching Fellow..... Fall 2024-2025

Georgia Tech | Center for Teaching and Learning

- Facilitate TA Development Academy for undergraduate and graduate teaching assistants.
- Conduct classroom observations and individual consultations with TAs, graduate students, and postdoc instructors.
- Collaborate with CTL faculty mentors to support programs that enhance teaching and learning.
- Assist in organizing CTL signature events, including Celebrating Teaching Day and TA and Future Faculty Awards Day.

INDUSTRY EXPERIENCE

Nian30 | Atlanta, US Mar. 2025 - Present

Co-founder / Side Project

A campus-based Chinese food startup promoting authentic street food culture to international students.
RESPONSIBILITIES | Marketing & outreach • Social media content strategy • Brand visual design (with AI-assisted tools) • User engagement & data analytics

C3 Cyber Club | Ashburn, US Nov. 2018 - Apr. 2019

After-school Instructor

A youth STEM education center focusing on creative coding and tech skills
RESPONSIBILITIES | Taught programming fundamentals to children through engaging, project-based learning.

Xyken | McLean, US Aug. 2018 - Apr. 2019

Multimedia Designer

A tech company specializing in mobile 3D imaging solutions
RESPONSIBILITIES | UI / UX • Graphic Design • Interface Design • Web Design

China Business Network | Shanghai, China Sep. 2013 - Jan. 2014

第一财经 | Communication Intern

China's leading financial media and business intelligence platform
RESPONSIBILITIES | Conference Organization • Advertisement • Project Management • Report

CCTV.NET | Beijing, China Mar. 2009 - June 2009

央视网 | Web Editor Intern

China's national-level news network and video broadcasting platform
RESPONSIBILITIES | Web Editing • Content Creation

AWARDS | HONORS

2024 Graduate Student Instructor Award Nomination..... Aug 2024
Georgia Tech – Tech to Teaching Program

Graduate Teaching FellowshipAug 2024
Georgia Tech – Tech to Teaching Program

Startup Launch FundJune 2024
Georgia Tech – Create X Program

PhD Graduate AssistantshipSep. 2019 - Now
Georgia Tech – Digital Media Program

Summer Research Grants July 2017
Duke University – Computational Media Program

National Scholarship Nov. 2013
China's Ministry of Education

Academic Scholarship 2011-2013
Tongji University

The Second Academic Scholarship July 2011
Minzu University of China

Excellent BA Thesis July 2011
Minzu University of China

SKILLS

Research

- Information Retrieval
- Data Collection
- Data Analysis (statistical or qualitative)
- Literature Review

- Research Design
- Interview

Software

- JASP
- ATLAS.ti
- Microsoft Office and Google suite
- AR/VR/XR Design and Developing
- Unity 3D (C#)
- Web Design (HTML, CSS, JS)
- 2D Design (Adobe Suite)