Ziyao Gao

PhD Candidate, Computational Media and Art Thrust
The Hong Kong University of Science and Technology (Guangzhou)
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Research interests
Human-computer interaction; Collaborative AI for creativity; Computational cultural heritage; Interactive art.

Education

The Hong Kong University of Science and Technology (Guangzhou) Sep 2024 - present
Ph.D. Candidate · Computational Media and Arts
Information Hub

Peking University Sep 2021 - Jun 2024
Master of Engineering in Computer Technology · Digital Art
School of Software and Microelectronics

Beihang University Sep 2017 - Jun 2021
Bachelor of Arts in Visual Communication Design · Digital Media Art
School of New Media Art and Design

Works

2026 **Decoding Traditional Chinese Patterns with the WenYi Structured Corpus**
Ziyao Gao, Huangjing Zhou, and Wei Zeng*.
ACM Journal on Computing and Cultural Heritage (JOCCH). Accepted, 2026.

2026 **Review on How Technologies Bring Traditional Patterns to the Digital Age**
Xiaoying Wei, **Ziyao Gao**, Huangjing Zhou, Wei Zeng, and Kang Zhang*.
ACM Computing Surveys. Accepted, 2026.

2026 **InkIdeator: Supporting Chinese-Style Visual Design Ideation via AI-Infused Exploration of Chinese Paintings**
Shiwei Wu, **Ziyao Gao**, Zhendong He, Zongtan He, Zhupeng Huang, Xia Chen, Wei Zeng, Xiaojuan Ma, and Zhenhui Peng*.
Proceedings of the CHI Conference on Human Factors in Computing Systems, 2026. DOI

2025 **Alternative Past**
Ziyao Gao, Teli Ma, Wei Zeng, and Theodoros Papatheodorou*.
SIGGRAPH Asia 2025 Art Gallery. Hong Kong, 2025. DOI

2024 **AI-rays: Exploring Bias in the Gaze of AI Through a Multimodal Interactive Installation**
Ziyao Gao, Yiwen Zhang, Ling Li, Theodoros Papatheodorou, and Wei Zeng*.
SIGGRAPH Asia 2024 Art Papers. DOI

2024 **IntentTuner: An Interactive Framework for Integrating Human Intentions in Fine-tuning Text-to-Image Generative Models**
Xingchen Zeng, **Ziyao Gao**, Yilin Ye, and Wei Zeng*.
Proceedings of the CHI Conference on Human Factors in Computing Systems, 2024. DOI

Occupation

Technical Artist Intern, NetEase Games Aug 2022 - May 2023

Improved visual quality and reduced rendering costs by developing and optimizing shaders, animations, and visual effects. Created procedural terrain and integrated it into the production pipeline.

Interaction Design Intern, Shanghai AI Laboratory Jul 2021 - Sep 2021

Built and tested low-fidelity prototypes for a medical research database platform. Developed the interface's visual style and created high-fidelity mockups.

Graphic Design Intern, DiDi Oct 2020 - Jan 2021

Designed posters, banners, and merchandise for online campaigns and in-person events. Assisted with filming, editing, and compositing promotional videos.

Skills and Tools

- **Graphic design & UI design & Video editing**
  PhotoShop, Illustrator, Indesign, Figma, Axure, Premiere, AfterEffect...
- **3D modeling & Animation**
  Maya, zBrush, 3dsMax, blender, SubstancePainter, Houdini, Gaea...
- **Game development & Interactive Art**
  Unreal Engine, Unity, P5.js, Touch Desigher, Processing, Arduino...
- **Programming**
  Python, C#, Html & CSS
- **Painting**
  Procreate, Hand painting...

Selected Awards

Outstanding Graduate of Beijing 2021
Municipal Award.

Excellent Bachelor's Thesis 2021
University Award.

National College Digital Art and Design Awards (NCDA) 2020
National Award. Second Prize, National Finals, Digital Image and Video Design.

Academic Excellence Scholarship 2018 - 2020
University Award. Grand Prize (2018), Second Prize (2019), First Prize (2020).

Social Work Scholarship 2018 - 2020
University Award. Second Prize.

Beijing College Students 3D Printing Competition 2019
Municipal Award. Second Prize.

Excellent Student Leader 2019
University Award.

Annual Outstanding Student 2018 - 2019
University Award.