

YUTONG ZHU

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EDUCATION

Royal College of Art, School of Design (Top-ranked in QS Art & Design for 11 years) London, United Kingdom
Master of Design, MDes Dec 2024 - Jun 2025

- Majoring in Design Futures
- Core Courses: Core Courses: Interdisciplinary Research Methodologies (15 credits), Complex Systems (15 credits), Envisioning Futures (15 credits), Research Proposal (15 credits), Research Development and Reflection (15 credits), Realisation (30 credits), Entrepreneurship (15 credits)
- Final-year project: Co-Cerebral Learning Future Designing for agent-centered collective intelligence environment in higher education 2050

Sichuan Fine Arts Institute, School of Design (Top 8 Fine Art Institute of China) Chongqing, China
Bachelor of Art, BA Aug 2020 - Jun 2024

- Distinction (both SCFA & Chongqing Province)
- GPA 95/100, Ranked 1/36, Majoring in Digital Media Art
- Core Courses: Information Interaction and Conceptual Design (95), Graduation Creation/Design (95), Professional Investigation (93), Cultural Research and Conceptual Exploration (93), Thematic Design 2 (93)
- Thesis: Poetic Form of Song Rhythm: Chinese Ancient Poem Creative Visualization Design Based On Generative AI 3D Content

PUBLICATION

Conference Paper:

- Zhu, Y., Zixiang F. (2025). *Speculative Design Meets AI: Exploring Creative Dynamics through Co-Speculative Workshops*. In *Proceedings of the HCI International 2025, Late Breaking Work, LNCS 16346*. Springer, Cham.
- Sun, H., Zhu, Y., & Duan, S. (2023). *Dynamic Classification Framework Based on Bio-Vitality*. CUMULUS Conference: Narratives of Love.

Patent:

- **Design Patent:** *Brainwave Feedback Training Toolkit*. Inventors: Yutong.Z., Henry.C.; Patent Number: ZL 202330579292.9 ; Date of Issue: July 30, 2020;
- **Design Patent:** *GUIMobile Phone with Charging Station Theme Desktop*. Inventors: Yutong.Z., Feifei.S.; Patent Number: ZL 202230311711.6; Date of Issue: March 18, 2022;

Poster & Demo :

- Zhu, Y. (under preparation). *Poetic Shapes: A Study on the Innovative Design of Digital Visual Poetry in Human AI Interaction*. Intended submission: *AAAI Journal of New Art (AAAI, 2026)*.
- Zhu, Y. (under submitted). *SprayScape: A Mixed Reality Platform for Graffiti Archiving, Attribution, and Cultural Preservation (CHI, 2026)*
- Zhu, Y. (under submitted). *Empowering, Not Replacing: Designing an Adaptive AI Agent Based on Six Thinking Hats to Enhance Student Agency and Critical Thinking (CHI, 2026)*

AWARDS AND PRIZES

Scholarship:

- CSC Scholarship, 2024, Arts & Design Talent Development Special Program (200 candidate per year) , sponsored by Chinese Scholarship Council
- Scholarship of Academic Excellence (Top 10% 1st Class & Top 30% 2nd Class), 2021-2024, awarded by School of Design, Sichuan Fine Art Institute
- Provincial Outstanding Graduate (1/10), 2024, awarded by Chongqing Municipal Education Commission
- Distinction Graduate (Top 10%), 2024, awarded by Sichuan Fine Arts Institute
- Scholarship of Yuhai Design Scholarship (1st in Academic GPA), 2023, awarded by School of Design, Sichuan Fine Art Institute
- Excellent Student Cadre, 2021-2022, awarded by Sichuan Fine Art Institute
- Merit Student Scholarship, 2022, awarded by Sichuan Fine Art Institute

Design Awards:

- *National College Design & Art Award* (1st Class), 2024, awarded by China Association of Higher Education
- *Red Dot Design Concept* (Finalist), 2023, awarded by Red Dot Association

- *International Design Award* (Silver & Bronze), 2023, awarded by IDA Association
- *European Product Design Award* (Top Design, 30%), 2023, awarded by EPDA Association
- *Spark Design Awards* (Student Winner, 30%), 2023, awarded by Spark Design Association
- *INTERNET+ Entrepreneurship Competition* (1st Class), 2022, awarded by China Association of Higher Education
- *National College Design & Art Award* (2nd Class), 2022, awarded by China Association of Higher Education
- *SCFAI Institution Prize* (53/2000), 2022, awarded by Sichuan Fine Art Institute
- *Outstanding Award*, 2022, awarded by SCFAI Exhibition Committee
- *Crossover & Integration New Media Art Contest*, 2021, awarded by Chongqing Association of Higher Education
- *Huawei Atlas Phone OS and Watch Face Design Award* (First Prize), 2021, awarded by HUAWEI Co., Ltd.
- *Future Mobility Design Award* (Best Sustainability), awarded by Wutong Chelian (Beijing) Network Technology Co., Ltd.

Exhibition:

- *"Human-Machine Joint Lunar Mobile Research Station"* - **14th National Art Exhibition**, Selected for Exhibition in Beijing, Information & Interactive Design Section, SCFAI Art Museum, Chongqing, China, 2024
- *"Intelligence-Calligraphy-Bamboo: AI-Generated Chinese Calligraphy Interaction Design"* - **14th National Art Exhibition**, Selected for Exhibition in Beijing, Industrial Design Section, SCFAI Art Museum, Chongqing, China, 2024
- *"Poetic Imagery in Shape and Charm - Ancient Poem Creative Visualization Design"* - **Technology, Art Creativity, and Artistic Productivity Exhibition**, Chengdu Art Museum, Chengdu, China, 2024
- *"Song Rhyme Poetic Form"* - **Graduation Exhibition**, SCFAI Art Museum, Chongqing, China, 2024
- *"Syncohe: The Wearable BCI Training Device for Esports Games"* - **Neuron Science Art Popular Science Exhibition**, Laboratory of Brain and Intelligence, Chongqing Brain Center, Chongqing, China, 2023
- *"Lunar Life Archive: Digital Narrative Web Design"* - **College Annual Exhibition**, Luo Zhongli Art Museum, Chongqing, China, 2023
- *"Metaverse Energy Station: Design"* - **Shenzhen Experience Design Association Young Designers UI/UX Special Exhibition**, Shenzhen, China, 2022
- *"BURN: Embodied Interactive Stereoscopic Projection"* - **College Annual Exhibition**, Luo Zhongli Art Museum, Chongqing, China, 2022
- *"BURN: Embodied Interactive Stereoscopic Projection"* - **Multi-Dimensional Vision Stereoscopic Projection Final Exhibition**, Huxi Art Gallery, Chongqing, China, 2022
- *"Stream"* **College "Rural Rebirth" Sketch Exhibition**, Huxi Art Gallery, Chongqing, China, 2021
- *"Stream"* **OnePlus X Hasselblad Camera New Media Interactive Art Installation Pop-Up Exhibition**, Chongqing, China, 2020

RESEARCH EXPERIENCE

Agent-Centered Future Education System

Research Assistant, Royal College of Art (RCA) – Wicked Acceleration Lab & RCA AI Club

London, United Kingdom

Apr 2025 - Now

- Designed and prototyped three AI collaborative tools—Reframe, Reflect, and Rethink—to study human–AI cognitive co-reflection in higher education.
- Developed behavioral experiments testing six AI personas (Analyst, Empath, Critic, Optimist, Innovator, Conductor) to assess their impact on learning trust, autonomy, and reflection depth.
- Introduced bias-nudge mechanisms and explainable interaction strategies to mitigate over-reliance and strengthen ethical transparency.
- Co-authored paper "Speculative Design Meets AI: Exploring Creative Dynamics through Co-Speculative Workshops" (HCII 2025); exhibited at RCA Design Futures 25 EXPO.
- Advanced understanding of AI literacy, co-cognition, and critical collaboration within HCI and educational contexts.

"Bamboo Wind" & "Poetic Imagery and Shape Charm"

Research Assistant, AI Creativity Lab, SCFAI & The Parsons, New York

Chongqing, China

Sep 2024 - Oct 2024

- Contributed to two stage-based projects exploring AI visualization of Chinese traditional culture.
- Bamboo Wind: Co-trained GAN models for calligraphic style transfer, transforming bamboo-leaf brushstrokes into font strokes; produced a generative bamboo-style font library, later exhibited at the Times Art Museum (Chongqing).
- Poetic Imagery & Shape Charm: Independently led AIGC text-to-3D translation pipeline, integrating ComfyUI, Diffusion models, and LLM-based semantic parsing to convert classical poetry into immersive visual sculptures.
- Developed custom semantic classification combining manual annotation + embedding vectors to better capture the “emotion–imagery–form” triad.
- Built dual datasets for text and imagery, aligned via semantic tagging, and fine-tuned a LoRA model to capture the emotion–imagery–form relationships.
- Publications: Research prepared for submission to AAAI; installations exhibited at Chengdu Art Museum and Luo Zhongli Art Museum.
- Gained deep understanding of Human–AI Co-Creation, exploring how designers evolve from “creators” to “collaborators” in intelligent systems.

EEG-Based Wearable Neurofeedback Device for eSports

Research Assistant, Center for Brain Science and Art, Chongqing University

Chongqing, China

01/2024 - 06/2024

- Collected and labeled EEG data from 78 professional gamers to study attention and fatigue under high-stress competition.
- Conducted signal preprocessing, feature extraction, and data visualization; designed the interaction interface bridging neuroscience and user experience.
- Led experiments that enabled the prototype Syncohe, a neurofeedback-based focus training system, recognized by Spark, EPDA, and IDA design awards.
- Tackled high-noise EEG environments via EMG/ECG denoising and adaptive filtering; proposed active stimulation design for fatigue relief.
- Designed an affective visualization interface linking EEG frequency bands to product light indicators, exploring neurofeedback as an active intervention concept.
- Conceptually integrated a tDCS-based neurostimulation module into the EEG product prototype to explore active intervention and fatigue relief.
- Strengthened capabilities in biometric data analytics, neural visualization, and human-computer interaction (HCI) design.
- Deepened insight into brain–computer interaction (BCI) as a two-way perception–feedback system connecting cognition, emotion, and adaptive interface design.

Smataste – AI-Driven Dining Experience System

Research Assistant, Royal College of Art × Sodexo France – AiD Lab

London, United Kingdom

Jan 2024 - Jun 2024

- Researched AI’s role in sustainable service ecosystems; co-designed an intelligent canteen interface using AI recommendation algorithms and multimodal feedback loops.
- Built the Smart Taste Index (STI) model analyzing taste preference and nutritional data; prototype deployed in Sodexo’s internal canteen, improving satisfaction and meal turnover.
- Developed Explainable Interfaces and participatory feedback mechanisms for ethical transparency and user co-creation.
- Demonstrated how AI-driven interaction design can balance operational efficiency, emotional experience, and sustainability.
- Strengthened expertise in AI service design, data visualization, and ethical AI integration, forming the methodological bridge between experimental HCI and real-world business systems.

L4-Level Human–AI Co-Driving Cockpit

Research Assistant, Changan Automotive × SCFAI Joint Lab

Chongqing, China

June 2024 - Sept 2024

- Focused on EMG and cognitive eye-gaze analysis to detect driver fatigue and response delay.
- Designed a multimodal fatigue-intervention prototype combining visual HUD, tactile feedback, and voice cues, reducing reaction delay by $\approx 30\%$ in user testing.
- Addressed the challenge of defining optimal human–machine boundaries during semi-autonomous driving; verified the use of scent-based interventions for fatigue relief.
- Project received Red Dot Design nomination and was featured at Shenzhen InnoX Innovation Forum.
- Strengthened expertise in physiological computing, multimodal HMI design, and cross-disciplinary collaboration between engineers, designers, and psychologists.
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Spatial Computing for Street Art Preservation
Project Lead , Collaboration with University of Melbourne

Chongqing, China
June 2022 - Now

- Led the design of a spatial-computing platform archiving and authenticating urban graffiti using AR visualization and blockchain attribution.
- Integrated geolocation anchors and digital certificates to ensure long-term stability and authorship verification.
- Highlighted in cross-cultural workshops as a model for cultural computing and socio-technical systems linking digital heritage with sustainable design.
- Conducted in-depth cultural and site analysis, exploring graffiti's impact on urban environments across various global locations, and proposed strategies to harmonize graffiti culture with local community values

Work Experience

Theme Design Team, HUAWEI Co, Ltd.

Shenzhen, China

UX Intern

Sep 2022 - Dec 2022

- Conducted extensive user surveys and keyword trend analysis to extract preferences, which directly informed visual style and design choices, enhancing user engagement during the pandemic
- Led the design and launch of two mobile themes and corresponding watch face designs on the Huawei Theme Store, complete with a unified 3D aesthetic, 68 official icons, and 51 third-party icons, culminating in an Appearance
- Patent and exhibition accolades
- Contributed to lock screen interactions, widget design, and overall theme interaction design, fully participating in user data analysis and design specification development based on official documentation

TikTok Effects workshop, ByteDance Ltd.

Chengdu, China

Filter Developer

Oct 2023 - Dec 2023

- Designed and launched six filters on TikTok and TikTok Lite, garnering over 1,000 interactions and in excess of 10,000 views, with one filter gaining a feature on TikTok's official homepage
- Conducted an in-depth analysis of special effects trends among TikTok's 500 million daily active users, leading to the development of custom effects across three key categories: beauty transformation, scene atmosphere, and fun AR
- Developed a range of effects including two beauty enhancement filters, one character design filter, one facial morphing filter, and two AR effects — one featuring a cute IP character and another creating an immersive AR scene

ADDITIONAL INFORMATION

Computer Skills

Matlab, SPSS, Nvivo, Origin, Python

3D Rendering

Blender / Cinema 4D / Octane / Keyshot / Mixer

Creative Coding

TouchDesigner / Processing / p5.js / max.msp / Unity / Ableton live /

Smart Hardware Interaction

Arduino IDE / esp32/ Leapmotion / Kinect / LoT(TinyML)

UX Design skills

Adobe Creative Suite / DaVinci Resolve / Figma / Principle / Webflow

Machine Creativity

ComfyUI / styleGAN / Stable diffusion/ ML/ LLM Prompt engineering