

Joey Yubai Shao CV

Name Joey Yubai Shao

Pronoun He/Him

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Hometown Shandong, China

Portfolio [Link](#)

Education Experience

2021 – 2025 | Bachelor's Degree of Industrial Design

Hunan University, Hunan, China

World-class universities or First-class disciplines (MoE, PRC) / Project 985 / Ranked 1st in China for Industrial Design in 2025 by ARWU / Ranked 29th in China in 2025 by ARWU / Ranked 448th worldwide in 2025 by QS

GPA: 3.29/4

June – July 2023 | Exchange Program

Design PF, Pforzheim University, Baden-Württemberg, Germany

Interaction Design Workshop

2025 – 2027 | MSc Design

Linköping University, Östergötland, Sweden

Ranked 304th worldwide in 2025 by QS

Work & Research Experience

2022 | Vivo and Hunan University Full-Screen Mobile Interaction Experiment Project

Experimenter

Conducted in-depth analysis of experimental data to propose enhancements for full-screen interaction logic, significantly optimizing user efficiency in targeted scenarios.

2023 | Master Project Research in Hunan University

Research Assistant

Developed a proprietary Python computer vision script that automated manual video data processing, drastically increasing analysis throughput and accurately extracting fingertip coordinates to mitigate lens distortion errors.

2023 – 2024 | Research on 3D Digital Anthropometric Study on Chinese Population at Hunan University

Intern

Conducted hand and facial landmarking and managed experimental data processing.

Professional Skills and Interests

- Skilled in digital and physical interaction design.
- Skilled in approaching design problems from a humanistic (see page 26 in portfolio) and philosophical perspective.
- Proficient in Gen-AI tools for design workflow and self-improvement.
- Experienced in design software such as Figma, Photoshop, Illustrator, Rhino, Blender, and Protopie.
- Competent in coding languages, including Python.
- Have basic knowledge of JS, CSS and HTML.
- Skilled in Arduino for physical interaction prototyping.

Language Skills

Chinese Native

English IELTS 7.5

Swedish Learning SFIC course

Project Experience

Research Project at the School of Design, Hunan University

- **Keywords:** Hand Recognition, Python, Interaction Design
- **Overview:** Independently developed a Python-based computer vision script to automate a video data processing workflow that had previously relied on manual work. Accurately extracted fingertip coordinates and reduced errors caused by lens distortion, significantly improving analysis efficiency.
- **Role:** Research Assistant
- **Duration:** Aug 2023 – Dec 2023

Vivo x Hunan University Full-Screen Smartphone Interaction Experiment

- **Keywords:** Interaction Design, User Testing
- **Overview:** Conducted user testing on touch interactions for full-screen smartphones and processed the resulting test data.
- **Role:** Experiment Assistant
- **Duration:** Oct 2022 – Dec 2022

AI Teaching Assistant Design Based on Large Language Models

- **Keywords:** LLM, RAG, AI Teaching Assistant
- **Overview:** Graduation project. Designed an AI teaching assistant in the form of a Figma plugin based on large language models, integrating AI support into the design workflow. Built a RAG-based knowledge base to provide users with professional design knowledge and case references, making responses more specific and in-depth while reducing hallucinations. Classified user questions into different categories and used tailored prompts and knowledge bases for each type. When evaluating design solutions, applied relatively fixed evaluation dimensions to improve response consistency. The project aims to help students obtain reliable professional information and quickly validate and iterate design concepts.
- **Link:** <https://pinwall.cn/project/57735>
- **Role:** Individual Project; independently completed all aspects
- **Duration:** Jan 2025 – Jun 2025

Usability Evaluation and Iteration of the Hunan University "Micro Life" Mini Program

- **Keywords:** Heuristic Evaluation, User Testing, User Experience Design, Interaction Design
- **Overview:** Based on Nielsen's usability principles, conducted designer-led heuristic evaluations to quickly identify interface, interaction, and user experience issues. Also carried out user-centered usability testing to qualitatively and quantitatively analyze users' real operational behaviors, verbal feedback, and scale results. Final design iterations were developed based on findings from both heuristic evaluation and user testing.
- **Link:** Portfolio and <https://pinwall.cn/project/54926>
- **Role:** Participated in heuristic evaluation; responsible for developing and refining the user testing plan; served as test moderator and data analyst; independently completed the interaction design iteration
- **Duration:** Jan 2024 – Jun 2024

ECG Monitoring System for Bus Driver Safety and Health Integrated with Autonomous Driving

- **Keywords:** Driving, Occupational Care, Service Design, Interaction Design, Arduino
- **Overview:** Designed a system addressing the frequent occurrence of acute cardiovascular diseases among bus drivers. Centered on an ECG monitoring device integrated into the steering wheel, the system combines in-cabin devices and a mobile app interface with autonomous driving technology to monitor driver safety and occupational health. It aims to reduce safety risks caused by acute cardiovascular disease, driving stress, and fatigue, while recording driving safety and cardiovascular health data.
- **Link:** Portfolio and <https://pinwall.cn/project/54678>
- **Role:** Individual Project; independently completed all aspects
- **Duration:** Jan 2024 – Jun 2024

Participatory Design of a Rural Logistics Service System in China

- **Keywords:** Service Design, Co-design, Participatory Design, Human-centered Care, Sustainability
- **Overview:** Based on Soft Systems Methodology, designed a rural logistics system by comprehensively considering the complex natural and cultural characteristics of rural China. For example, by combining parcel collection points with village gathering spaces, the project leveraged the moral supervision embedded in word-of-mouth social networks in rural communities, effectively reducing parcel loss, creating public gathering spaces, and increasing local employment. The final proposal addressed pain points such as parcel loss, dispersed delivery, low purchasing power, empty return trips, and fluctuating transport demand through sustainable and context-sensitive solutions.
- **Link:** Portfolio and <https://pinwall.cn/project/54300>
- **Role:** Participated in early-stage research and the implementation of Soft Systems Methodology and the Analytic Hierarchy Process; led the design and iteration of the final sustainable and practical solution
- **Duration:** Jan 2024 – Jul 2024

Data Visualization Projects

- **Keywords:** Data Visualization, AI Agent, JavaScript, Python Data Processing
- **Overview:** During undergraduate study, created a city traffic IoT data visualization prototype integrated with an AI Agent and a visualization website exploring the plot and sex education knowledge in Netflix's *Sex Education*. During master's study, designed emotionally driven hand-drawn data visualizations inspired by *Dear Data*, and developed a visualization project on the democratization history of Taiwan based on the visualization principles in *The Truthful Art*.
- **Link:** <https://pinwall.cn/project/52026>, <https://pinwall.cn/project/52537>
- **Role:** Individual Projects; independently completed all aspects
- **Duration:** Sep 2023 – Present

Contemporary Art Projects

- **Keywords:** Installation Art, Interactive Art, Media Art, Arduino, p5.js, Python
- **Overview:** Created several physical prototypes of interactive artworks on different themes and in different forms using Arduino, p5.js, and Python. During undergraduate study, designed works themed around emotional barriers through concepts such as remote hugging and heart rate; developed an experimental device using Bluetooth communication and LEDs to express personal gender identity; and designed participatory exhibition spaces that enabled viewers to engage bodily with Chinese social issues through deconstructive experiences. During master's study, developed projects including a tangible interaction alarm clock, a remote interactive space, and an embodied interactive flowerpot.
- **Link:** <https://pinwall.cn/project/45094>, <https://pinwall.cn/project/44824>, <https://pinwall.cn/project/50662>
- **Role:** Participated in concept iteration and project production; involved in physical prototyping; independently completed Arduino and Python coding
- **Duration:** Sep 2022 – Present

Smart Anti-Escape Cat App

- **Keywords:** User Experience Design, Smart Home, Pet Economy
- **Overview:** Designed an app to address the problem of cats escaping from home and getting lost. Based on the increasing adoption of smart home products and the growth of the pet economy in China, the app allows users to customize both the smart home hardware to be activated and the level of intervention. Beyond preset luring strategies, users can use a no-code programming feature with simple “condition” and “action” modules to create personalized automated luring plans, or directly describe their needs to an AI assistant. Users can also adjust the effectiveness settings of the hardware-based luring functions.
- **Link:** Portfolio and <https://pinwall.cn/project/50190>
- **Role:** Led project progress; responsible for service blueprint, interaction logic, and app interface design
- **Duration:** Sep 2023 – Dec 2023

Gesture Interaction Solution for Product Model Display

- **Keywords:** Interaction Design, Python, Hand Recognition, Exhibition Design
- **Overview:** Developed an interactive prototype during an Interaction Design workshop at Pforzheim University in Germany from June to July 2023. Using Python, OpenCV, and Unity, the project enabled users to control 3D model perspective changes, mode switching, and other functions through intuitive hand gestures.
- **Link:** <https://pinwall.cn/project/49007>
- **Role:** Participated in gesture interaction design; independently developed hand recognition and model animation code
- **Duration:** Jun 2023 – Jul 2023

Business Creation for a Multifunctional Smart Portable Lamp, Emotional Light Interaction System, and SaaS Platform for Camping and Home Use

- **Keywords:** Interaction Design, Product Design, Business Model
- **Overview:** Designed an innovative emotional light interaction system centered on a smart portable lamp, integrating SaaS-enabled technology and products into a complete product-service business model. The project aimed to blur the boundary between indoor and outdoor environments, allowing users to preserve memorable natural lighting experiences encountered outdoors and recreate them later either outside or indoors, thereby building an immersive lighting experience ecosystem.
- **Link:** <https://pinwall.cn/project/56183>
- **Role:** Responsible for early-stage research and interaction solution development; participated in business model design
- **Duration:** Sep 2024 – Dec 2024

Smart Study Alarm Clock for Students with ADHD

- **Keywords:** Interaction Design, Special Needs Care, AI Assistant
- **Overview:** Designed a product intended to help students with ADHD manage time and improve concentration. Integrating the Pomodoro Technique, it supports study-rest cycle reminders and uses gentle music and visual cues to reduce stress. Users can flexibly adjust reminder timing and frequency, and configure settings and track learning progress in real time through a mobile app. The product also provides silent and focus modes to reduce distractions, with an overall design focused on simplicity and ease of use to improve study efficiency and academic performance.
- **Link:** <https://pinwall.cn/project/53495>
- **Role:** Responsible for user research and service flow design
- **Duration:** Jan 2024 – Jun 2024

Research on Information Reminder Frequency in Navigation Apps

- **Keywords:** Interaction Design, User Behavior Research, Navigation App

- **Overview:** This research explored how the frequency of navigation app prompts affects driving performance in simulated ride-hailing scenarios, particularly at intersections. Different navigation prototypes with varying prompt frequencies were designed, and participants completed driving tasks that were analyzed through behavioral data and questionnaires. The results showed that prompt frequency significantly influenced drivers' reaction time, attention allocation, and perceived cognitive load: too few prompts could lead to missed critical information, while too many increased cognitive burden. The study proposed directions for optimizing navigation prompt design to improve safety and efficiency in human-computer interaction.
- **Link:** <https://pinwall.cn/project/48698>
- **Role:** Responsible for test plan design, data analysis, and research conclusions
- **Duration:** Jan 2023 – Jun 2023