Liangzhu Campus, China Academy of Art, Hangzhou, China

□ (+86) 15616714790 | ■ luoshan3398@qq.com

Education

China Academy of Art (CAA)

Hangzhou, China

MASTER OF INDUSTRIAL DESIGN

Sep 2020 - June 2023

- CGPA: 3.807/4.0
- Lin Fengmian Scholarship, Outstanding Alumni of China Academy of Art.

University of South China

Chanasha, China

BACHELOR OF INDUSTRIAL DESIGN

Sep 2016 - June 2020

- CGPA: 2.98/4.0
- Outstanding Graduate of Hunan Province.

Research Interests _

Accessibility; Human-Computer Interaction (HCI); Fairness between People with Disabilities and Non-disabled Individuals. My research direction is to explore the imbalances and fairness that exist between blind and sighted individuals in different relationships. I design systems and interaction techniques to empower them in real-life activities as well as in the emerging virtual worlds.

Conference paper _____

Conference Paper/Journal

RESEARCHER

- Shan Luo*, Jianan Liu, Botao Hu. "Demonstrating the Design of an Auditory-Cued Archery Exergame for the Visually Impaired and Their Sighted Family and Friends." In Companion Publication of the 2024 Conference on Computer Supported Cooperative Work and Social Computing, (CSCW'24 Companion). Demo.
- Shan Luo*, Jianan Liu, Botao Hu. "Designing a Safe Auditory-Cued Archery Exertion Game for the Visually Impaired and Sighted to Enjoy Together." In The 26th International ACM SIGACCESS Conference on Computers and Accessibility. (ASSETS'24). Poster
- Shan Luo*, Jianan Liu, Botao Hu. "Hearing the Bullseye: An Auditory-Cued Archery Exergame for the Visually Impaired and Their Sighted Family and Friends." Student Competition. In Companion Proceedings of the Aunnual Symposium on Computer-Human Interaction in Play. (CHI PLAY Companion'24), Student Competition.
- Jianan Liu, **Shan Luo**, Botao Hu. "Foldiverse: Augmenting Paper Folding Physiotherapy for Children with Autism via Family-Centered Mixed Reality Design" Student Competition. In Companion Proceedings of the Aunnual Symposium on Computer-Human Interaction in Play (CHI PLAY Companion'24), Student Competition.
- Shan Luo*, Jianan Liu, Botao Hu. "Hearing the Bullseye: An Auditory-Cued Archery Exergame for the Visually Impaired and Their Sighted Family and Friends." In Companion Proceedings of the Aunnual Symposium on Computer-Human Interaction in Workshop for Family-Centered Design. (CHI FCD Workshop'24).
- Shan Luo*, Jianan Liu, Botao Hu. "Hearing the Smile: Scoring Spontaneous Social Scenes for the Visually Impaired." In Companion Proceedings of the Aunnual Symposium on Computer-Human Interaction. (IEEE VR), Camera Ready.
- Shan Luo*, Yun Wang. "Research and practice of innovative design of archery sports products with slighted and blind play together." CNKI'23.

Research Experience _____

Reality Design lab

New York, US

MENTOR PROFESSORS: BOTAO HU.

March 2024 - Present

• "Hearing the Smile" —Scoring Spontaneous Social Scenes for the Visually Impaired: Can the visually impaired (VI) "hear" others' smiles? This study employs an ethnographic experiential futures methodology to envision Al-driven melodic auditory augmentation beyond traditional descriptive approaches for spontaneous social interactions involving VI individuals. We propose a mid-fidelity research probe: "See Sing," a smart glasses application that translates facial expressions, gestures, and environmental cues into emotionally contextual soundscapes, akin to real-time cinematic scoring. (CHI 25), Under Review.

Alibaba Cloud Design × China Academy of Art

Hangzhou, China

MENTOR PROFESSORS: YUN WANG, BOTAO HU.

Jan 2021 - June 2023

• VI and sighted individuals' equal competition: Research on how to use digital technology to empower the competitive abilities of visually impaired (VI) individuals, designing and developing an archery game with sound-based interactions. This compensates for the inherent disadvantages of blind players in games, enhancing equality and balance between blind and sighted players in gaming. Achieve equal competition and communication between blind and sighted individuals. (CHI PLAY'24, CSCW'24, ASSETS'24, CHI FCD Workshop'24)

Design Innovation Center, China Academy of Art

Hangzhou, China

MENTOR PROFESSORS: WANG YUN

Jan 2021 - June 2023

- Family-centered simple sound shooting interaction game: to make the experience of equal competition more family-centered for blind individuals, we simplified the previous archery game into a paper version, which can be easily operated with just a smartphone and paper. This app facilitates sound-based CS shooting games for both blind and sighted players.(CNKL'23) (West Bund Art Design Expo Yearbook'23.)
- Research on a sub-healthy blind assistive sleep system: Some visually impaired individuals experience sleep disorders due to a lack of photoreceptive capabilities, leading to disrupted circadian rhythms. The study investigates using different halogen lights to irradiate proteins in the skin rich in light sensitivity to effectively regulate biological rhythms. This research ultimately led to the design and development of a lampshade-type product demo and user experiments. (University-level New Talent Plan Funding: XM2021180.)

Academic Achievements _____

Magazine

RESEARCHER

- Shan Luo*, Yun Wang. Archery with the Blind. Health Development: Design Empowerment. Peking University Press'23.
- Shan Luo*, Chenkai Yang, Yun Wang. A CS Live-action Shooting Game App for Blind and Sighted Co-play. West Bund Art Design Expo Yearbook'23.
- Shan Luo*, Yan Cheng, Hanxiang Fang, Li Ping Luo, Yun Wang. Hearing the Bullseye. Design Intelligent Award Yearbook'21.

Patent

RESEARCHER

- Yun Wang, Ji Hong Zhu, Yan Cheng, **Shan Luo**, Han Xiang Fang, Li Ping Luo, Long Fei Zhou, Lu Lin. *A method for enabling fair archery competition between blind and sighted individuals.* Utility model patent, No: ZL202110530004.0.
- Yun Wang, Ji Hong Zhu, Yan Cheng, **Shan Luo**, Han Xiang Fang, Li Ping Luo, Long Fei Zhou, Lu Lin. *Bow, Listening Arrow.* Design patent, Application No: 202130290451.4.

Funding

RESEARCHER

- **Shan Luo**(PI), Longfei Zhou, Yun Wang. *Research on the design of a live-action CS sound shooting game app under the concept of joint play for the visually impaired and sighted.* RMB10000. National Innovation and Entrepreneurship Project: 202210355061.
- Shan Luo(PI), Mengyuan Mao, Yun Wang. Research on a Sub-healthy Blind Assistive Sleep System, RMB10000. University-level New Talent Plan Project: XM2021180.

Work Experience

Mindverse.AI Hangzhou, China

AI PRODUCT MANAGER

Aug 2023 - Dec 2023

 Developed overseas AI agent interaction products-Mindos, conducted user research, identified market demands, and developed the company's product strategy and layout. (product website link)

Entrepreneurial Experience _____

Hangzhou, China

Boss Jan 2022 -

- Secured an angel investment of 100,000 RMB, engaged in the dissemination and practice of inclusive design for disabled and non-disabled individuals
- Exhibition: Design and construct the International Asian Games Blind Archery Exhibition, Alibaba Cloud Energy Expert.
- Talk: a series of public welfare lectures, Little Red Book's Public Welfare Organization, China Disability Fund Association.
- Exhibition: 2021 Shanghai Maker Carnival.
- Talk: Invited to speak at the Beautiful China Research Institute's 100 Young People's Conference, promoting products like "Hearing the Bullseye" that integrate disabled and non-disabled people.
- Blogger: on Little Red Book focusing on accessible design, with 20k followers, created the DesignYouth topic with 2.6 million viewers.

Project Experience

"Low Carbon Campus System Platform Design". China Academy of Art × Alibaba Cloud Design

Hangzhou, China

DESIGNER Aug 2022 - Dec 2022

• Responsible for planning the low-carbon mall rules operation within the low-carbon campus project team at China Academy of Art, designing user low-carbon behaviors and mall exchange reward mechanisms, and implementing experiments on the ground. (link)

"Mixed Reality Liangzhu Heaven and Earth Theater". Design Innovation Center × XinhuaZhiyun Company

Hangzhou, China

CULTURAL RESEARCHER Aug 2020 - Dec 2020

• Studied artifacts and books related to Liangzhu's historical civilization, applied in AR digital products.

"Noise Reduction Experience Design for OPPO's High-End Flagship Phones". Design Innovation Center × OPPO

Hangzhou, China

UP/UX DESIGNER

Jan 2022 - July 2022

• Explored scenarios and demands for "noise reduction" experiences (stress relief, do not disturb, anti-interference, immersion, etc.) among users of OPPO's high-end flagship phones, proposing innovative and implementable design concepts. Provided clear direction for the phone's noise reduction system and strong OS strategy and design solution support. (link)

"D·will Design Talks". Design Intelligent Award

Hangzhou, China

ACADEMIC ASSISTANT

Dec 2020 - July 2023

Responsible for planning multiple lectures and workshops, hosting design celebrities from both domestic and international backgrounds. Planned and organized corporate study tours: Digital Future Design Inquiry: DIA New Media Global New Youth × Alibaba Cloud Design Center. (Platform link)

"Hangzhou Grain Bureau Grain Warehouse Cultural Image Design Project". Hangzhou Government

Hangzhou, China

CULTURAL RESEARCHER AND DESIGN LEADER

July 2022 - Dec 2022

• Conducted research on China's grain warehouse culture, proposed architectural design strategies, landscape design strategies, and cultural and creative product design strategies for the Grain Bureau.

Teaching Experience

Product Innovation Design Joint Course co-hosted by China Academy of Art × Zhejiang Topson Industrial Group

Hangzhou, China

TEACHING ASSISTANT

Sep 2022 - Dec 2022

• Led undergraduates from the 2019 cohort of the Institute of Living Aesthetics and the Institute of Digital Interaction at China Academy of Art in the joint design and development of outdoor travel products.

Press .

- 2023 China Youth Daily, "This Post-95s Girl Uses AI to Help Blind and Able-bodied People..."
- 2021 **Zhejiang News**, "Archery with Ears as Eyes"
- 2021 **Today's Headlines, Jiupai News**, "Post-95s Girl Develops 'Sunny Blind Co-Play' Shooting..."
- 2023 Xiaohongshu Social Media, Hot Search List, "Hot Search with 500w Traffic..."
- 2023 **Human Pixels**, "Hearing, This Colorful World"

Selected Awards and Honors _____

2018	Third Prize, Hunan Province Internet Plus College Students Innovation and Entrepreneurship	China
2021	Honorable Mention, DIA China Design Intelligent Manufacturing Award	Global
2021	Gold Award, 13th International User Experience Competition (UXDA, UXPA)	Global
2022	Finalist, World Summit on the Information Society (WSIS) Award Nomination	Global
2022	Finalist . OPPO Global "Smile Proposal" Finalist Award	Global

Selected Exhibitions _____

2021	Alibaba Design Week, Hearing The Bullseye	Hangzhou China
2021	Beyond the Realm:Design Intellegence Center Honorable Mentions, Hearing The Bullseye	Shaoxing China
2022	Dutch Design Week, Hearing The Bullseye	Dutch
2022	4th China Design Exhibition and Public Art Special Exhibition, Hearing The Bullseye	Shenzhen China
2023	hanghai West Bund Art And Design Expo, A Live-action CS Sound Shooting Game App	Shanghai China
2023	Zhejiang Exhibition Hall, A Live-action CS Sound Shooting Game App	Hangzhou China
2023	Hong Kong University of Science and Technology, A Live-action CS Sound Shooting Game	Guangzhou China

Other Interests and Hobbies _____

Enjoys playing billiards: I has won the third prize in the Hunan Provincial College Students' Billiards Cup Competition.

Interested in Traditional Chinese Medicine and Metaphysics: Host of the popular podcast "Guanyin Listening to the World" across various online platforms, with 5000 followers.

Enjoys reading strange and supernatural novels: such as "Strange Stories from a Chinese Studio," "Notes from the Thatched Cottage of Close Observations," and "Zi Bu Yu."

Enjoys story speaking and design thinking: Host of the podcast "Talking Design Blindly".

Skills: Proficient in Chinese design philosophy with the Five Views and Five Methods, innovative design thinking, and intelligent manufacturing design.