Yaxuan (Stella) Mao

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SUMMARY OF QUALIFICATIONS

- **Proficient in User Experience Research (UXR)**: User research, user testing, co-design, A/B test, usability testing, survey design, diary studies, thematic analysis.
- **Design tools**: Adobe Creative Suite (Illustrator, Premiere, After Effects), UE5, Unity, Figma, Maya, etc.
- **Strong Programming Skills**: Python (Advanced), C++ (Advanced), JavaScript (Advanced), CSS (Advanced), HTML (Advanced), OpenCV (Advanced), OpenFramework (Advanced), C# (Intermediate), Arduino (Intermediate), Processing (Intermediate), SQL (Intermediate), D3.js (Intermediate), ROS (Intermediate).
- **Five years of proven leadership experience** with effective communication skills, teamwork, and project management as demonstrated through entrepreneurship, academic project, student assignment, and extracurricular activities.

EDUCATION

University of Washington, *Seattle, WA* *Expected June 2027*
Master of Science, Human Centered Design and Engineering (HCDE)

- Relevant Coursework: User-centered Design, Design Process Resilience, Experimental Research Methods

City University of Hong Kong, *Hong Kong, China* *Sep. 2020 - Jun. 2024*
Bachelor of Science, Creative Media ***Cum Laude (Top 10%)***

- Relevant Coursework: User Experience Research and Design, Visual Communication (UI/UX), Interdisciplinary Research, Data Structure, AI Game Programming, Algorithm, Multi-modal Interface, Computer Vision

RELEVANT EXPERIENCE

Digital China | AI Researcher Intern *April - August 2025*

- Designed a planning framework to enhance **LLM-based AI agent** performance in enterprise scenarios.
- Applied **model optimization (LoRA, FlashAttention)** to finetune models for improved efficiency in digital HR scenarios.
- Integrated **MCP framework** and **RAG** to improve model reliability and enable accurate use of external real time data and APIs, resulting in a **28%** reduction in task errors and a **35% boost** in data-retrieval accuracy.
- Increased Qwen's performance accuracy from **32% to 86%** on scenario-specific evaluations.

Tsinghua University | Part-time Researcher *April - October 2025*

- Applied a **mixed-methods approach**, combining **qualitative insights (user interviews, thematic coding)** with **quantitative data (usability and performance metrics)** to inform interface design.
- Designed and evaluated a **robot prototype** that improved users' reading focus by **26.7%** and engagement by **15.9%**.

Youth Incubator | UI Designer *June - October 2024*

- Design and implement UI components using **WebPress, HTML, CSS, and JavaScript**, improving website usability and visual appeal for **over 1,500 monthly visitors**.
- Maintained brand and design consistency by **updating over 30+ UI elements** to align with new course offerings and refreshed organizational branding, resulting in a **15% increase** in user engagement on key pages.

BiWell | Researcher *June 2023 - March 2025*

- Led **co-design workshops** with children, guardians, and dentists to capture diverse perspectives on pediatric dental experiences and anxiety triggers.
- Conducted **qualitative analysis** of workshop data, identifying key emotional and behavioral themes that informed the design of a VR-based intervention system.
- **Prototype** an immersive VR experience in **Unreal Engine**, improving children's comfort and engagement.

SeeWall Limited | Co-Founder & Product Designer *August 2021 - February 2023*

- Led **user-centered research** and **iterative design** to develop assistive tools for visually impaired users, conducting interviews and usability tests with **50+ participants**.
- Translated key insights into two inclusive products—an audio-guided navigation app and a wearable obstacle-detection belt—that **boosted navigation accuracy by 28%** and **reduced user stress and hesitation by 35%**, enhancing both usability and emotional confidence.

PUBLICATION LIST

P1 **Yaxuan Mao**, Yanheng Li, Duo Gong, Pengcheng An, Yuhan Luo. 2025. "Can I Decorate My Teeth With Diamonds?": Exploring Multi-Stakeholder Perspectives on Using VR to Reduce Children's Dental Anxiety. In *Proceedings of the 28th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW).*

P2 Katie Xue, **Yaxuan Mao**, Junnan Yu, Yuhan Luo. 2025. Toward Interactive Reading: Co-designing with Adolescents to Explore Opportunities for Overcoming Reading Challenges. In *Proceedings of the ACM Conference on Interaction Design and Children (IDC '25) WiP.*

P3 Yanheng Li, Long Bai, **Yaxuan Mao**, Xuening Peng, Zehao Zhang, Antoni B Chan, Jixing Li, Xin Tong, RAY LC. 2024. Affecting Audience Valence and Arousal in 360 Immersive Environments: How Powerful Neural Style Transfer Is? In *Proceedings of the International Conference on Human-Computer Interaction (HCII).*

P4 Yanheng Li*, **Yaxuan Mao***, Ray LC. 2023. Communicating Failure Recovery with Robotic Body Movement. In *Proceedings of the 21th IEEE International Conference on Robotics and Automation (ICRA)*, workshop. [Published]

P5 Yanheng Li, Long Bai, **Yaxuan Mao**, Hongliang Ren, Yu Qiao, Xin Tong and Ray LC. 2023. Rethinking Pain Communication of Patients with Alzheimer's Disease through E-textile Interaction Design. In *Proceedings of Frontiers in Human Neuroscience.*

P6 Yanheng Li, Long Bai, **Yaxuan Mao**, Xuening Peng, Zehao Zhang, Xin Tong, Ray LC. 2023. The Exploration and Evaluation of Generating Affective 360◦ Panoramic VR Environments Through Neural Style Transfer. In *Proceedings of the 30th IEEE International Conference on Virtual Reality and 3D User Interfaces (VR).*

P7 Yanheng Li, Luoying Lin, Xinyan Li, **Yaxuan Mao** and RAY LC. 2023. "Nice to meet you!": Expressing Emotions with Movement Gestures and Textual Content in Automatic Handwriting Robots. In *Proceedings of the 18th ACM/IEEE International Conference on Human Robot Interaction (HRI)*, late-breaking report.