

Yixuan Li

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Research Interests: HCI, Fabrication, Tangible, AI-Assisted Embodied Learning Systems

Education

Tsinghua University	2025 ~ Present
<ul style="list-style-type: none">Shenzhen International Graduate School, M.S. in Electronic Information<i>Core Class: Artificial Intelligence and Innovative Development, Innovative Methods for Non-contact Physiological Sensing, Product Design and Development, X-Robot Development</i>	
Beijing Forestry University (211)	2021 ~ 2025
<ul style="list-style-type: none">School of Art and Design, B.A. in Product Design, AverageScore: 92.7 (GPA: 3.88/4.0), Ranking: 1/34 (1/180).School of Information Science and Technology Computer Art (Minor)	

- Honor and scholarship:**
- 2023-2024 Baosteel Outstanding Student Scholarship (~500 national awardees per year)
 - 2022-2023, 2023-2024 China National Scholarship (1%), 2025 Beijing Outstanding Graduates (5%)
 - 2023-2024, 2022-2023, 2021-2022 BJFU Outstanding Student First Class Scholarship (2%)
 - 2023-2024, 2022-2023, 2021-2022 BJFU Scholarship for Academic Excellence
 - 2021-2022 BJFU Special Scholarship for New Students (2%), 2021-2022 BJFU Scholarship for Cultural and Sports Excellence,


Publication

[1] HanoCH: a Modular and Multimodal Cultural Heritage System for BLV users
ACM CHI'26 (CCF-A) REBUTTAL STAGE Yixuan Li, Pingting Chen, Ziqi Gong, Jiayong Huang, Xin Tong.

[2] GenRole: Personalizing Role Play for Educators Supporting Autistic Students' Social Interaction Learning
ACM CHI'26 (CCF-A) REBUTTAL STAGE Yixuan Li, Keyi Zeng, Jiaqi Zong, Yinying Zhu, Xin Tong.

[3] EchoClass: An LLM-Driven System for Differentiated Lesson Planning in Special Education
Jing Yang Lin, **Yixuan Li**, keyi Zeng, Hongni Ye, Hongzhu Deng, Xin Tong. **In submission**

[4] Understanding Interdisciplinary Collaboration in Haptic-Fabric Wearable Design: Insights from a Kit-Based Prototyping Study
Yixuan Li*, Shuai Wang*, Xiuqi(Tommy)Zhu, Xiaozhan Liang, Rui Zhang, Xiwen Yao, Jiao Yang. **In submission**

[5] SofiBuddy: Soft mobile Interface for On-Body Interaction
Yixuan Li, Jie Yu, Chenwan Zhong, Zhaowen Deng, Teng Han, Yi Cai, Xin Tong.
 **Poster Award, ACM SIGGRAPH Asia' 24 (CCF-A) Poster** Computer Graphics and Interactive Techniques-Asia

[6] SemanticTap: A Haptic Toolkit for Vibration Semantic Design of Smartphone
Rui Zhang*, **Yixuan Li***, Jiao Yang.
ACM ICMIT' 24 (CCF-C) ACM International Conference on Multimodal Interaction

[7] EmoPus: Providing Emotional and Tactile Comfort with a AI Desk Companion Octopus
Yixuan Li*, Zhaowen Deng*, Yanyin Zhu, Xin Tong.
ACM USIT' 24 (CCF-A) SIC Adjunct Proceedings of the 37th Annual ACM Symposium on User Interface Software and Technology.

[8]HapticMetric: A Smartphone Haptic Experience Computing Systemg [J].
Rui Zhang*, **Yixuan Li***, Jiao Yang.
ACM ChineseCHI' 24 International Chinese Association of Computer Human Interaction

[9] Community Ecosystem Balance: Research on Design Strategies and Implementation Paths of Green Community Services[J].
YuFei Wang, **Yixuan Li**, Peng Han.
(Chinese Social Sciences Citation Index, CSSCI) Urban Development Research,2025(02).

Research Experience

Tsinghua University Future Lab Research Assistant	2022-11 ~ 2024-05
<i>Advisor: Yang Jiao.</i> <ul style="list-style-type: none">Led projects including <i>SemanticTap</i> [6], <i>Haptic Metric</i> [8], and <i>Haptic-Fabric Wearable Design</i> [5].Conducted research on vibrotactile feedback evaluation and haptic perception. Designed and fabricated haptic actuators and wearable systems	
The Hong Kong University of Science and Technology (Guangzhou) Full-time Research Assistant	2024-07 ~ 2025-09
<i>Advisor: Prof. Xin Tong</i> <ul style="list-style-type: none">Led projects including <i>HanoCH</i> [1], <i>GenRole</i> [2], <i>EmoPus</i> [7], and <i>SofiBuddy</i> [3]. Participate in the project <i>EchoClass</i>[4]Directed research on tangible interaction, digital fabrication, and AI-assisted accessibility design.Gained extensive experience with PLA/FDM 3D printing and diverse fabrication processes.	
The University of Texas at Dallas, School of Computer Science Project leader	2025-06 ~ Present
<i>Advisor: Liang He, Xin Tong</i> <ul style="list-style-type: none">Led the Tactio project, Developed swarm robot prototypes for delivering haptic feedback in VR environments.Fabricated electroosmotic pumps, printed electronics, and Toio-based 3-DOF tilting platforms	
Southern University of Science and Technologys, School of Design Visiting Student	2023-05 ~ 2023-12
<i>Advisor: Prof. Mirna ZORDAN</i> <ul style="list-style-type: none">Participated in a project on behavioral performance of environments under complex conditions, conducting literature reviews and developing Unity projects related to human peripheral vision.	

North Carolina State University, School of Wilson College of Textiles Project leader <i>Advisor: Prof. Rong Yin.</i> <ul style="list-style-type: none"> Responsible for project on Emolink: Textile Devices Based on SCR Signals. Applied the SMA based on SCR signal to origami structured textiles wearable device. Research poster presentation Awarded 2024 Winter GEARS Program-Certificate of Excellence. 	2024-01 ~ 2024-03
University of Rochester, School of Computer Science Research Intern <i>Advisor: Prof. Yukang Yan.</i> <ul style="list-style-type: none"> Responsible for prjct on A Visualization Study to Facilitate Social Connections in VR Asynchronous Games. Capturing users' behavioral, developing visual physiological data interfaces as socio-emotional cues in asynchronous VR game. 	2024-01 ~2024-05

Exhibition & Industry Collaborations [Please see portfolio for details](#)

[Main Contributor]"Mycelium Spectrum"-Seeing-Diversity Digital Media Art Exhibition, Guangzhou Library, 2025 <ul style="list-style-type: none"> We developed an interactive system, metaphor of mycelium to support children with developmental disorders. Mixed media: nickel-copper fabric, acrylic, lightweight clay, electronic components 	
[Lead] Plastic Response x Artworks Composition Patch Series, 798 Art Space Exhibition, 2024 <ul style="list-style-type: none"> Collaborate with the eco-friendly brand Plastic Answer, developed recycled plastic sheets Exhibited in the Infinity x City-Children's Art Festival at the Shanzhongtian Art Center-Genkan. 	
[Lead] IKEA x LIVAT Sustainable Healing Space Installation, Beijing Aloha Commercial Space, 2024 <ul style="list-style-type: none"> Collaboration with IKEA and INGKA Group, we designed a space installation in Beijing's largest commercial space for parents and children. The work was introduced to Jesper Brodin, CEO of INGKA Group, and was supported by the leading groups in Sweden and China. 	
[Lead] Xiaomi 14&14pro Vibration Waveform Optimization Design, Xiaomi Flagship Phone, 2023 <ul style="list-style-type: none"> Using accelerometers, Pico5444DMSO oscilloscopes, semi-structured interviews with users, UEQ, using multiple linear regression, KMO, particle swarm optimization algorithms to analyze the data and generate new waveforms (see <i>SemanticTap [6], Haptic Metric [8]</i>). 	

Academic Competition

Entrepreneurship Competition <ul style="list-style-type: none"> The 8th China International Innovation and Entrepreneurship Competition for College Students, Provincial Excellence Award; The 1st Youth Green Science and Technology Innovation Competition, 2nd Prize of the National Competition; The First National Student Career Planning Competition, 2nd Prize of Beijing Region Employment Track; "Youth Creating Beijing" "Challenge Cup" Capital University Students Science and Technology Competition, 2nd Prize; Computer Application Competition of Five Provinces in North China, 2nd Prize ; China Hainan Free Trade Port High School Main Track, Excellence Award; 	
Design Competition <div> <div> <ul style="list-style-type: none"> The Ninth "Creativity - Made in China" Automobile Design Competition, National 2nd Prize (3%); The 5th China University Student Research English Speech Contest, National Grand Prize (14th in China, the first student from BJFU to win this prize); The 7th Beijing Cultural Creativity Competition, Finalist Award; 2023 Beijing Industrial Design Competition for College Students, 2nd, 3rd Prize and Excellence Award; 2023 NCDA Future Designer Competition, Beijing 3rd Prize; </div> <div> <ul style="list-style-type: none"> 2023 DiD Award Dongguan Cup International Industrial Design Competition, Excellence Award; The 11th International Art & Design Competition Mutual Arts Award, Excellence Award; 2023 Venice International Art and Design Award, Student Group Nomination Award; 2023 USDA Design Competition, 2nd Prize; 2023 G CROSS Design Competition, 2nd Award; 2023 HK Contemporary Design Competition, 2nd Prize; </div> </div>	

Internship Experience

Takway.ai (Shenzhen Lingdong Future Technology Co., Ltd.) Interaction Design Intern <ul style="list-style-type: none"> Co-designed "Sweekar", an AI pocket pet integrating AI, nurturing gameplay and multi-sensory hardware, covering interaction flows and product structure; scheduled for Kickstarter & CES 2026 and featured by 21st Century Business Herald and major expos (CITE 2025, wteam AI Maker Festival, Shanghai New International Expo Centre). 	2025-11 ~ present
BMW (China) Service Co., Ltd Electric Vehicle Program & User Research Internship <ul style="list-style-type: none"> Conducted testing and market research on the BMW tram charging system as well as in-vehicle hardware and interfaces, and analyzed competitor vehicles such as NIO and XPeng for cross-testing comparisons. 	2023-12 ~ 2024-05 5 months
North Carolina State University Campus Ambassador <ul style="list-style-type: none"> Participated in 3 international program presentations, as well as in the media campaigns for the Red Book and website. Attending 2024 Summer NC State Developing Cultrual Competence etc. 	2024-01 ~ 2024-05 4 months
Guangzhou Yuanwukong Technology Co. UI Designer <ul style="list-style-type: none"> Cooperate with developers to complete the tasks of interaction, design and user experience research of the project. Analyze business requirements and generate interface and physical product prototypes through user research. 	2022-10 ~ 2023-07 9 months
Shenzhen EDA Art Space Curatorial Assistant <ul style="list-style-type: none"> Responsible for planning and arranging the solo exhibition of Central Academy of Fine Arts artist Dazhi, dynamic poster production etc. Accumulated more than 10,000 radiant people. 	2022-06 ~ 2022-09 3 months

Skills & Hobbies

Engineering & Hardware Arduino, ADAMS, 3D Printing (FDM, SLA) Laser Cutting, CNC, Silicone Casting. Design Rhino, AutoCAD, Solidworks, Adobe PS, AI, AE, ID, Figma, Procreate. CS Python, LLM Implementation, HTML, JavaScript. In my spare time, I enjoy alpine skiing and squash .	
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