

BINGXU HOU

Computer Science & Artificial Intelligence
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CS & AI undergraduate with experience across research, software and product development, computer vision, digital health, and university-facing digital services. Builds from problem framing and evidence collection through implementation, evaluation, and deployment.

EDUCATION

University of Nottingham Ningbo China (UNNC)

Sep 2024 - Jun 2028 (Expected)

BSc Computer Science and Artificial Intelligence

Year 1 GPA 4.0/4.0 (82/100) | Year 2 GPA 3.8/4.0 | Li Yip Yio Chin Scholarship: RMB 70,000/year | IELTS 7.0 (Reading 9.0)

PROFESSIONAL EXPERIENCE

Ningbo Shuotong Embodied Intelligence Co., Ltd. / Research Fun

Jun - Jul 2026

Algorithm Intern

Conducted affective-computing literature research, comparative experiments, data organisation, model tuning, and technical documentation; contributed to a municipal “Data Elements x” competition solution awarded Third Prize.

[Centre for English Language Education \(CELE\), UNNC](#)

Jul 2026

Intern; Independent Website Designer / Developer & Maintainer

Independently designed, built, and maintained the bilingual 2026 Pre-Sessional Information Hub for nearly 1,000 students and staff, covering programme schedules, registration, announcements, emergency contacts, and student services.

RESEARCH & SELECTED PROJECTS

[AI-PPT Tutor - Evidence-grounded learning workspace](#)

Mar - Sep 2026

First Author; Co-Creator / Developer / Study Lead

Built a PDF/PPT learning system with adaptive OCR (Tesseract.js), native/OCR text merging, confidence weighting, structure-aware chunking, BM25 + embeddings, multi-query retrieval, RRF/MMR, reranking, visual analysis, and claim-level evidence verification.

Led a 36-participant 2x2 factorial HCI study on evidence grounding and source attribution; submitted first-author paper to IHCI 2026 (decision pending as of 29 Aug 2026).

Artificial Intelligence-enabled Adaptation in Rehabilitation Games

Mar - Jun 2026

Third Author; Systematic Review Researcher

Contributed across the PRISMA workflow for 29,777 identified records and 32 included studies, including screening, classification, data curation, validation, evidence synthesis, and original-draft preparation; manuscript submitted.

Patient-Facing VR in Gynecologic & Related Reproductive Procedures

Jul - Sep 2026

Researcher; Review-design & Methods Contributor

Designed the study workflow and research questions, developed search strategy, completed PRISMA/classification work, drafted Methods, and performed substantial data extraction/validation for the ongoing scoping review.

[Vocab Glance - Apple-native ambient vocabulary learning](#)

2026 - Present

Co-Creator / Apple-Platform Developer

Built and shipped a Swift/SwiftUI macOS/iOS vocabulary product with persistent glance learning, IELTS/CET-4/CET-6 content, widgets, local-only storage, and App Store distribution outside mainland China.

[Video-driven 2D Digital Twin Generation for Indoor Human Movement](#)

2026

Repository Coordinator; Door Detection / Scale Anchor; Multi-view Fusion Contributor

Contributed door geometry/scale anchoring and per-view BEV alignment/fusion in a modular monocular-video-to-metric-floor-plan pipeline; managed the shared repository and module interfaces.

ADDITIONAL SHIPPED WORK & LINKS

[Connection Atlas](#) - local-first relationship graph with BFS paths and JSON backup | [i²Lab](#) - bilingual research-lab website | [CELE Hub](#) - production information hub | [Digital Twin Repo](#) | [Connection Atlas Repo](#) | Zest U - search “Zest U” in WeChat

SKILLS & ENGAGEMENT

Programming: Python, Java, JavaScript, SQL, Swift/SwiftUI, React/Next.js, HTML/CSS, Git/GitHub, Vercel | **AI/CV:** LLM APIs, retrieval-supported generation, OCR/Tesseract.js, reranking, vision-language analysis, semantic segmentation, BEV & multi-view fusion | **Research:** factorial experiments, UEQ, S-TIAS, interviews, PRISMA reviews, evidence synthesis

Leadership: Learning Community Forum Student Representative (Sep 2024-Present); invited CELE AI-sharing speaker (Apr 2025).

Note: Blue text indicates clickable links to live projects, products, and related work.
AI-PPT Tutor and Connection Atlas may require VPN access from mainland China.