

WENHAN LYU

✉ wlyu@wm.edu · 📞 +1 (201) 616-8663 · in lyu-wenhan · 🌐 Website · 🎓 Google Scholar

RESEARCH PROFILE

My research investigates how to design, build, and evaluate Generative AI systems as effective collaborators to enhance human learning and problem-solving. I specialize in Human-Computer Interaction, employing a mixed-methods approach that integrates user-centered design with full-stack prototyping (React, Python) to explore AI's role in K-12 education and undergraduate-level programming. Seeking a 12-24 week research internship for 2026 to apply my skills to real-world challenges in collaborative AI.

PUBLICATIONS

- **Lyu, W.**, et al. “*Designing AI Peers for Collaborative Mathematical Problem Solving with Middle School Students: A Participatory Design Study*” ACM CHI, 2026. (Acceptance rate: 25.3%)
- **Lyu, W.**, et al. “*Will Your Next Pair Programming Partner Be Human? An Empirical Evaluation of GenAI as a Collaborative Teammate...*” ACM Learning at Scale (L@S), 2025. (Acceptance rate: 21.4%)
- **Lyu, W.**, et al. “*Understanding the practices, perceptions, and (dis) trust of generative AI among instructors... in the US higher education.*” Computers and Education: Artificial Intelligence, 2025.
- **Lyu, W.**, et al. “*Evaluating the effectiveness of LLMs in introductory computer science education...*” ACM L@S, 2024. (Acceptance rate: 24.4%)
- Huang, Y., ..., **Lyu, W.** et al. “*TrustLLM: Trustworthiness in Large Language Models.*” ICML, 2024. (Acceptance rate: 27.5%)

ONGOING RESEARCH

Human-free Software Development with Self-organizing AI Agent Teams Feb 2026 - Present

Developing infrastructure for self-organizing AI agents that autonomously plan, implement, and verify milestones in long-horizon coding projects, operating at week-scale with asynchronous human oversight via GitHub issues/PRs. Current work is extending verification from terminal-centric checks toward browser-rendered frontend validation through dedicated automation and evidence pipelines to support web development.

EDUCATION

William & Mary, Virginia, United States Jan 2024 - Present

Ph.D. Candidate in Computer Science Advisor: Yixuan (Janice) Zhang

Lead TA, Web Programming (CSCI 432). Co-designed curriculum and 8 autograded assignments for 70+ students.

New York University, New York, United States Jan 2021 - May 2023

M.S. in Computer Science

TA for graduate-level Operating Systems (CSCI-GA.2250).

Nankai University, Tianjin, China Sep 2016 - Jun 2020

B.Eng. in Computer Science and Technology

INDUSTRY EXPERIENCE

ByteDance, Frontend Engineering Intern Feb 2021 – Jun 2021

Developed and shipped production features for a customer-service chatbot (React, Redux, TypeScript), collaborating with UX teams to iterate on designs based on user engagement metrics and feedback; built reusable frontend components to improve development consistency and reduce implementation time; engineered a streamlined system-configuration flow that increased automated problem resolution from 54% to 60%.

SKILLS

- **Programming:** JavaScript / TypeScript, Python, C/C++
- **Web Development:** React, Svelte, Node.js, TailwindCSS
- **HCI/UX Methods:** User Interviews, Thematic Analysis, Usability Testing, Participatory Design, Prototyping
- **Developer Tools:** Git, Docker, Figma, Google Cloud, Qualtrics