

Yuren Hao

yurenh2@illinois.edu
(447) 446-0345
<https://blackhao.com>

EDUCATION

RESEARCH EXPERIENCE

Research Intern — TIMAN Group, Siebel School of Computing & Data Science, UIUC Sep 2024 – Present - Developed a systematic methodology for evaluating LLM robustness in mathematical reasoning. - Created **PutnamGAP**, a 6k+ item benchmark of mathematically-equivalent competition-level problems. - Evaluated 18+ LLMs under symbolic and parametric perturbations. - Contributed to the **Web Navigation Agent** project: environment design, model finetuning, and data collection for an ICLR 2025-affiliated effort. - Explored memory and preference-based retrieval mechanisms for conversational agents. - Leading **four ongoing research projects** (details withheld).

Research Intern — Coordinated Science Laboratory (CSL), UIUC Oct 2025 – Present - Investigating stability issues in training deep **Spiking Neural Networks (SNNs)**. - Working on biologically plausible learning dynamics and gradient stability.

TEACHING EXPERIENCE

Course Assistant — CS124 (Intro to Computer Science I), UIUC

Jan 2025 – May 2025

- Assisted students with Java programming fundamentals and debugging.
- Held weekly office hours and 1-on-1 tutoring sessions.
- Created instructional resources and collaborated with staff on course materials.

ENGINEERING & TECHNICAL EXPERIENCE

VOLUNTEERING & SERVICE

Data Analyst — TORIIS.earth Feb 2025 – Present - Analyzed fossil-fuel-related financial assets in UIUC's corporate bond portfolio. - Conducted data cleaning, classification, and environmental impact assessment.

ENGINEERING & TECHNICAL EXPERIENCE

Program Committee — **AAAI 2026 Aug 2025 – Sep 2025** - Reviewed academic submissions and contributed to acceptance recommendations.

Localization Specialist — **The Tor Project Sep 2025 – Present** - Provided localization support for Tor software and documentation. - Improved multilingual accessibility of privacy-enhancing technologies.

PUBLICATIONS

An Investigation of Robustness of LLMs in Mathematical Reasoning: Benchmarking with Mathematically-Equivalent Transformation of Advanced Mathematical Problems

Yuren Hao, Xiang Wan, ChengXiang Zhai

arXiv preprint arXiv:2508.08833, Aug 12, 2025

PROJECTS

SKILLS

Programming & Engineering - Python, Java, C++ (proficient) - JavaScript, CSS, CUDA (intermediate) - NetLogo (basic)

Machine Learning / AI - LLM finetuning and evaluation - Reinforcement learning - SNN training (ongoing research) - Transformer-based modeling pipelines

Languages - Chinese (Native), English (Native-level) - Japanese (Elementary), Russian (Elementary)

Creative Technology - DMX lighting systems, stage operations - 3D modeling (3Ds Max, SketchUp) - Unity / Unreal Engine - Generative art & visualization (p5.js, React) - Video editing (uploads routinely 50k+ views)

Last Updated: Nov 2025