

CS Graduate & Software Engineer

CHEN, DANCHUN (Nexus)

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B.S. Graduate in Cybersecurity

[Personal Website](#)

Fudan University, Shanghai, China

EDUCATION

Fudan University

Shanghai, China

B.S. in Cybersecurity

Sep. 2020 - July. 2025

College of Computer Science and Artificial Intelligence

PUBLICATIONS AND WORKSHOPS

- Towards a Mechanistic Understanding of Propositional Logical Reasoning in Large Language Models
Danchun Chen, Qiyao Yan, Liangming Pan
ACL ARR 2026 January Submission. Under Review.
- Empowering Self-Verification of Small Language Models through Step-wise Reasoning and Verification
Danchun Chen, Yixin Cao, Liangming Pan
XLLM Workshop @ ACL 2025. 2nd Place in LLMsR. Poster Presentation. [\[Code Repo\]](#)

RESEARCH EXPERIENCE

MOE Key Lab of Computational Linguistics, Peking University

Remote

Remote Intern (Mechanistic Interpretability)

Sep. 2025 - Present

- Honored to be supervised by [Prof. Liangming Pan](#).
- Mechanistic Interpretability in Propositional Logic Reasoning (**ACL ARR 2026, Under Review**)
 - Conducted mechanistic analysis of Qwen3 (8B and 14B) on PropLogic-MI, a controlled dataset spanning 11 propositional logic rule categories across one-hop and two-hop reasoning.
 - Uncovered four interlocking mechanisms: Staged Computation, Information Transmission, Fact Retrospection, and Specialized Attention Heads, providing mechanistic evidence that LLMs employ structured computational strategies for propositional logical reasoning.

The Fudan University Natural Language Processing Group

Shanghai, China

Research Intern (LLM Reasoning)

Mar. 2025 - Jul. 2025

- Honored to be supervised by [Prof. Yixin Cao](#); co-supervised by [Prof. Liangming Pan](#) (College of Information Science, University of Arizona).
- Step-Wise Reasoning and Verification (SWRV) Framework (**XLLM @ ACL 2025, 2nd Place**)
 - Proposed SWRV, a two-stage Parser-Verifier framework for step-wise self-verification in small LLMs (e.g., Llama-3-8B-Instruct) using minimal data.
 - Integrated deterministic symbolic solver Z3 by translating problems and reasoning steps into symbolic formulas for formal inference.
- Undergraduate Thesis: LLMs on LSAT Logic Games
 - Conducted systematic comparison of Long CoT and neuro-symbolic hybrid reasoning paradigms for LLMs on LSAT analytical reasoning; evaluated accuracy-efficiency trade-offs and performed data contamination detection.

Institute of Big Data, Fudan University

Shanghai, China

Research Engineer

Oct. 2022 - Mar.2023, Sept.2024 - Jun. 2025

- Honored to be supervised by [Prof. Yang Zhou](#).
- The Effect of Climate Change on Public Health (Sep. 2024 - Jun. 2025)
 - Merged high-resolution meteorological data with hospital visit records from 125 hospitals; employed fixed-effects models, CNNs and FASTNN to analyze temperature's influence on public health.

- How Much Can Machines Learn Finance from Chinese Text Data? (Oct. 2022 - Jun. 2023)
 - Replicated Textual Factor Model on Chinese stock market data. [\[Publication\]](#)

PROFESSIONAL EXPERIENCE

SAP Commerce Cloud

Full-Stack Software Engineer, **Full-time**

Shanghai, China
Nov. 2024 - Present

- Implemented kubernetes-based multi-tenant SaaS platform for e-commerce configuration management with dynamic domain generation and tenant isolation.
- Led development of full-stack LLM proxy platform offering unified model access across multiple providers.
- Designed context engineering framework for software engineering agent automating complete SDLC from requirements to deployment.

Poizon International Technology Department

Backend Software Engineering, **Intern**

Shanghai, China
Sep. 2023 - Feb. 2024

- Facilitated integration of European buy-and-sell platforms onto Dewu App; implemented product synchronization, attribute mapping, and expired product handling.
- Developed Feishu Robot for order query and SQL scripts for automated data consistency checks.

HONORS AND AWARDS

- **Certificate of 2nd Place**, ACL 2025 Workshop XLLM Shared Task: LLMSR 2025
- **National Third Prize**, National College Student Information Security Competition (Top 15% out of 774 teams) 2023
- **National Bronze Award**, China International College Students Innovation Competition (Top 0.4% out of 42,100,000 teams) 2023
- **Third Prize**, Shanghai College Students Mathematics Competition 2024
- **Undergraduate Excellence Scholarship**, Fudan University Multiple Years

LEADERSHIP EXPERIENCE

Fudan Runner Association

Founder And President

Shanghai, China
Sep. 2021 - Feb. 2023

- Led strategic planning and development for the association, set up the framework.
- Coordinated collaborations with Nike and secured initial funding for pre-registration operations.
- Organized over 20 events, each attracting a minimum of 15 participants, including three major races with over 100 attendees.
- Launched the “Run Bubble” campus event during the 2022 Shanghai lockdown, engaging 180+ participants and fostering student fitness enthusiasm amidst the pandemic.

SKILLS AND HOBBIES

- **Languages:** Chinese (Native), English (Fluent), Japanese (Elementary), Chaoshan Dialect (Native)
- **Programming:** Java, Python, C++, C, TypeScript, SQL, LaTeX, Linux
- **Sports:** Marathon, Hiking, Cycling
- **Travel:** Solo-traveled to half of mainland China and 10+ countries