

# CS Graduate & Software Engineer

## CHEN, DANCHUN (Nexus)

B.S. Graduate in Cybersecurity

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Fudan University, Shanghai, China

### EDUCATION

#### Fudan University

*B.S. in Cybersecurity*

*College of Computer Science and Artificial Intelligence*

Shanghai, China

Sep. 2020 - July. 2025

### PUBLICATIONS AND WORKSHOPS

- Towards a Mechanistic Understanding of Propositional Logical Reasoning in Large Language Models  
*Danchun Chen, Qiya 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 LMs (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