Wen Fan

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EDUCATION

Purdue University West Lafayette, USA
Major: Electrical and Computer Engineering *Aug. 2024 – Present*
Degree: PhD
Advisor: Prof. Jenna DiVincenzo

University of Science and Technology of China (USTC) Hefei, China
Major: Computer Science and Technology *Sept. 2018 – Jun. 2022*
Degree: Bachelor
GPA: 3.75/4.3

RESEARCH INTEREST

Program Verification

PUBLICATIONS

Evaluating the Ability of Large Language Models to Generate Verifiable Specifications in VeriFast [pdf]
Marilyn Rego, Wen Fan, Xin Hu, Sanya Dod, Zhaorui Ni, Danning Xie, Jenna DiVincenzo, Lin Tan. The 2nd ACM international conference on AI Foundation Models and Software Engineering (FORGE 2025)

RESEARCH EXPERIENCE & PROJECTS

Evaluating LLM on generating specifications for separation logic Purdue University
Advisor: Prof. Jenna DiVincenzo *Sept. 2024 – Now*

Vicious Cycles in Distributed Systems Purdue University
Advisor: Prof. Yongle Zhang *June. 2022 – Apr. 2023*
We investigated a type of failure in distributed systems, where an event causes a system degradation and it further causes more events. I joined half-way in this project.

- Collected some cases of those failures on Apache Jira.
- Tried implementing a static analyzer on retry pattern in distributed systems such as Hadoop.

DSLAB (Sharded and Fault Tolerant Distributed Key-Value Store) CS505 project at Purdue University
Developed from University of Washington, DSLAB is a framework for building and debugging distributed systems for educational purposes. I did this lab with my friend and passed most of the tests.

- Implemented Primary-Backup, Paxos and Two Phase Commit protocols.
- Debugged to pass more than 90% of tests (including searching tests on corner cases).

TEACHING ASSISTANT EXPERIENCE

Mathematical Logic, USTC *Spring 2021*

CS252 Systems Programming, Purdue University *Fall 2022, Spring 2023, Spring 2024*

CS251 Data Structures, Purdue University *Fall 2023*

AWARDS

Huawei Scholarship *Nov. 2020*
Huaxia Talent Program at USTC *June 2022*

SKILLS

Programming Languages: ~~C, C++, Java, Python, Go~~ (chatgpt)
Frameworks: ~~Django, Soot~~ (chatgpt)
Algorithms: Leetcode 100+, CS584 (Computation Complexity)
Languages: English, Chinese
Sports: Running