Hongtai Hu 胡弘泰

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Education

Xiamen University Sep 2026 — Jul 2029 (expected)

Master's student · Computer Science and Technology

Nanjing University of Aeronautics and Astronautics Sep 2022 — Jun 2026

Bachelor of Engineering · Information Security

Honors & Awards

ICPC Asia Regional Contests 2025

Silver medals · Xi'an and Shanghai

ICPC Asia Regional Contests 2024

Bronze medals · Hangzhou and Kunming

CCF Outstanding Undergraduate Student Program 2025

Selected · China Computer Federation

Selected Projects

Language Server Fuzzing & Defect Discovery Oct 2025 — Jun 2026

Undergraduate thesis research · Rust / LibAFL / LSPFuzz / LiteLLM

- Extended an existing LSPFuzz-based testing workflow using Rust, LibAFL, and LLM-generated, semantics-aware mutators via LiteLLM.
- Tested Clang/clangd, ZLS, rust-analyzer, and Sorbet; minimized source inputs and LSP sequences, and prepared crash traces and cross-version reproduction evidence.
- At least 36 LLVM reports have corresponding merged fixes, including 3 patches submitted by me. A further 3 reports have merged fixes in ZLS (1) and Sorbet (2).

Selected reports: shutdown during an in-flight rename (fix #198019); template annotation use-after-free (fix #196788).

Fix status verified on 2026-11-12 includes upstream merges after the thesis period. AI assistance was used in investigation and implementation.

A RISC-V 32-bit emulator Jan 2025 — Jun 2025

Computer systems course project

- Implemented instruction decoding, CPU execution, device models, and exception handling. Ran The Legend of Sword and Fairy on the emulator to exercise the system.

Teaching & Academic Support

Teaching Assistant · C Programming Sep 2023 — Jan 2024

Supported teaching, prepared assignment questions, and helped students with debugging and exam preparation.

Peer Instructor · Student Academic Support Sep 2023 — Jun 2024

Led review sessions in C++, data structures, and algorithms, covering tree traversals, shortest paths, and dynamic programming.

Skills & Interests

Languages: C/C++; experience with Rust, Python, and Java.

Interests: Software engineering; Fuzzing; Compilers; Systems programming.