#### **Zexin Jian**

# (+86) 155-7423-3383 ≥ zexinjian@gmail.com xinchen-jzx.github.io

My research interest includes:

- > Managed Runtime System
- > Machine Learning System
- > Large Language Models (LLM)

I will continue to search, even if the endless stars make my search hopeless, even if I am alone.



#### **Education Background**

Sep. 2021 ~ present Changsha, China National University of Defense Technology (NUDT)

B.E. Student, School of Computer Science

Advised by Dr. Zengkun

Jun.2024 ~ present Beijing, China **Chinese Academy of Sciences (CAS)** 

Visiting Student, Institute of Computing Technology (ICT) co-Advised by Dr. Huimin Cui and Dr. Chenxi Wang

#### Research & Publications

- > [NeurIPS'24 CCF-A] Zhihua Wen, Zhiliang Tian, Zexin Jian, Zhen Huang, Pei Ke, Yifu Gao, Minlie Huang, Dongsheng Li. Perception of Knowledge Boundaries for LLMs via Semi-open-ended Question Answering.
- > [ACL'23 CCF-A] Zhihua Wen, Zhiliang Tian, Zhen Huang, Yuxin Yang, Zexin Jian, Changjian Wang, Dongsheng Li. GRACE: Gradient-guided Controllable Retrieval for Augmenting Attribute-based Text Generation.

### </>> Projects

**SysY Compiler** 

**Compiler Design** 

2024-02~2024-08

C++, LLVM, RISCV, Compiler Design, Multi-Threads Parallel

- > Developed a fully functional compiler system for SysY2022 (a C Subset) using C++ as the primary programming language.
- > Successfully passed all functional test cases, supporting lexical analysis, syntax analysis, semantic analysis, and target code generation.

mini RustOS Operating System Design 2024-09~2024-12

Rust, X86, OS Design, Hybrid Kernel

- > Developed an experimental operating system kernel for the X86 architecture using Rust as the primary programming language.
- > Starting from the macro kernel, absorbing and learning from the design patterns of the micro kernel to improve security while ensuring certain performance.

## **Expertise**

**Programming** C++, I

C++, Python, Rust

Skills Linux, PyTorch, CMake, CUDA