TINGZHEN YAN MSE

(+86) 13261600800 ytz22@mails.tsinghua.edu.cn https://frankenstaint.github.io/tzy.github.io/

EDUCATION

School of Software, Tsinghua University

Beijing, China

MSE in Software Engineering

2022 - 2025 (expected)

• GPA: 3.71/4.00

• Research area: cybersecurity

College of Computer Science and Hongshen Honors School, Chongqing University Chongqing, China

B.E. in Computer Science and Technology

2018 - 2022

• GPA: 3.89/4.00, Weighted Average Mark: 91.32, Rank: 1/27.

Publications

1. Changhua Chen, **Tingzhen Yan**, Chenxuan Shi, Hao Xi, Zhirui Fan, Hai Wan, and Xibin Zhao. The Last Mile of Attack Investigation: Audit Log Analysis towards Software Vulnerability Location. *IEEE Transactions on Information Forensics & Security*, 2024.

Internships

Meituan | Beijing, China

2024.05 - 2024.08

- Downgrade query by truncating recall in the Query Engine. Downgrade the topK parameter of vector index queries.
- An in-place update scheme for the real-time inverted index of the storage engine was designed.
- Refine storage engine monitoring and implement memory monitoring for different tables.

Byte Dance | Beijing, China

2021.10 - 2022.01

- Feature task platform migration. Migrate the feature calculation tasks on Dorado to the team's self-developed platform.
- Batch task logic reconstruction. Optimize feature calculation logic mainly to reduce invalid traversal during aggregation and optimize sorting when truncating results.

PROJECTS

C language compiler design

I implemented a C language compiler that supports a subset of the C language, generates runnable mips assembly code, and supports error detection. 2021.05 - 2021.06

MIPS CPU design

A five-stage pipeline CPU was completed, which supports 57 instructions and exception processing. 2021.01 - 2021.02

Awards and Honors

- Friends of Tsinghua-Glodon Technology Research Scholarship, Tsinghua University 2023
- Chinese Academy of Sciences Undergraduate Scholarship, Chinese Academy of Sciences
 2020
- Yan Jici Class Scholarship, Chinese Academy of Sciences, 2020
- Chongqing University Comprehensive Scholarship*4, Chongqing University 2020
- Chongqing University Excellent Student, Chongqing University 2020
- The second prize of Mathematics competition of Chinese College Students, The Chinese Mathematical Society
- The first prize of Chongqing University Mathematics Competition, Chongqing University 2019

SKILLS

Languages: Chinese, English.

Programming: C/C++, python, java, assembly, gcc, make, gdb, git, Spark.