JIAJUN QIN

hobbitqia@gmail.com | 🞧 github.com/HobbitQia

RESEARCH INTEREST

I am a third-year undergraduate student at Zhejiang University. My research interests include **Machine Learning systems**, **heterogeneous computing** and **computer architecture**. Currently, I focus on acceleration of classic Machine Learning algorithms on heterogeneous devices(e.g. FPGA).

EDUCATION

Zhejiang University, Chu Kochen Honors College

Sep.2021 - June.2025(expected)

Bachelor of Science, Computer Science and Technology

Hangzhou, Zhejiang, China

• GPA: 91.77/100.00 Rank: 4/78

• Selected Courses: Computer Organization and Design(99), Fundamental of Data Structure(99), Advanced Data Structure and Algorithm Analysis(96), Mathematical AnalysisI II(95 95)

PROJECTS

HobbitCPU: A Pipelined RISC-V Processor | Verilog

Spring 2023

course project of Computer Organization and Design, individual

- I built a 5-stage pipelined RISC-V processor with Verilog. It operates on the machine level and supports: most RV32I instructions from the official specifications. It supports forwarding, predicting not taken and it has data and instruction caches.
- I have verify the correctness of the processor on Kintex 7 FPGA.

MiniSQL: A Basic DBMS | C++

Spring 2023

course project of Database System, teamwork

- We develop a basic DBMS in C++, which includes a disk manager, buffer pool manager, table heap, B+ tree index, catalog manager, SQL parser and executor. It supports common database operations and comes with an interactive SQL interpreter.
- I was involved in the development of buffer pool managaer, table heap, B+ tree index and SQL executor.
- Our DBMS can pass all the test cases of the course. And it can handle querying on 100,000+ records in 0.2 second.

TEACHING ASSISTANT

Introduction to Computing Systems

July 2023 - Sep 2023

Zhejiang University

Hangzhou, Zhejiang, China

• Instructors: Yale N. Patt

• Topic: Digital logic, assembly language & computer organization

HONORS AND AWARDS

Third Prize in National Student Computer System Capability Challenge

August 2023

Merit based the performance of the MIPS processer

Zhejiang Government Scholarship

Fall 2022

Merit based scholarship for leading students

Zhejiang Province, China

SKILLS

Programming Languages: C/C++, Verilog, Chisel, Python, Rust

Languages: Chinese (Native), English(CET-6 575)