YESHENG LIANG

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ACADEMIC BACKGROUND

Bachelor of Computer Science, Tsinghua University   2019 – Expected 2024
Major GPA last year: **3.91/4**
Current overall GPA: **3.76/4**

Course	Grade	Course	Grade
Computer Organization	A-/4.0	Introduction to Database Management System	A/4.0
Software Engineering	A+/4.0	Theory of Computer Network	A-/4.0
Assembly Language Programming	A/4.0	Formal Languages and Automata	A-/4.0

RESEARCH INTERESTS

Computer systems, including operating systems, databases, and high performance computing.

RESEARCH EXPERIENCE

Storage Research Group, Tsinghua University   Jan 2022 – Present
Research Intern **(ongoing)**   *Advised by* **Prof. Youyou Lu** *and* **Dr. Youmin Chen**

- Perform user-space scheduling over mixed workloads in distributed HTAP systems. Aim to exploit small time intervals 1) between aborts and retries in optimistic transactional processing, and 2) during RDMA requests to other shards, to achieve higher throughput in analytical processing while maintaining low latency of transactional workloads.

Institute of Trustworthy Networks and Systems, Tsinghua University   Sept 2020 – Jan 2021
Students Research Training   *Advised by* **Prof. Jiliang Wang**

- Perform indoor positioning using new generations of Wi-Fi NICs. Measure the distance between two NICs by retrieving the round-trip time of fine-timing measurement signals produced by the NIC.

SELECTED PROJECTS

Simple RISC-V CPU *(Collaborative course project)* A five-stage pipeline RISC-V CPU implemented with SystemVerilog, running on FPGAs. Supports RISC-V privilege stack including privileged instructions, virtual memory, exceptions, etc., and is able to run a simple educational operating system (uCore). Source Code

Simple DBMS *(Course project)* A built-from-scratch database management system that supports most of the basic SQL and advanced features including indexing and table joins. Source Code

Simple Compiler *(Course project)* A compiler for an educational C-subset language. Implementation includes the full stack of compiler construction. Source Code

MkDocs Blogging Plugin *(Personal project)* An open-sourced blogging plugin for the static site generator MkDocs. Reached 2k+ downloads per month on PyPI & 50+ stars on GitHub. Source Code

Treehollow *(Personal project)* An open-sourced iOS client for a campus forum maintained by volunteer students. Reached 17k+ downloads on the App Store. Source Code

Whiz Reader *(Personal project)* An iOS PDF reader to provide convenient translation from English to Chinese. Reached 25k+ downloads on the App Store. It was my first project before joining computer science in the second year of my undergraduate. Link

SKILLS

Languages	C, C++, Rust, Swift, Python, Go, JavaScript, Bash, SQL, VHDL, SystemVerilog
Tools	Git, LaTeX, Docker, Make, CMake, Bazel