

# YESHENG LIANG

Tsinghua University ◊ Beijing, China

[liang2kl@outlook.com](mailto:liang2kl@outlook.com) ◊ [GitHub](#)

## EDUCATION

---

### Tsinghua University

*B.Eng. in Computer Science and Technology*

2019 – Expected 2024

Beijing, China

## EXPERIENCE

---

### Research Assistant

*Xtra Computing Group, National University of Singapore*

Aug. 2023 - Present

*Advised by Prof. Bingsheng He*

- Proposed a novel method Tree-as-a-Prompt to train decision trees and incorporate them into the prompt of language models.
- Achieved significant performance boost in classification tasks compared to state-of-the-art models; submitted to VLDB 2024.
- Responsible for proposing ideas, system design, and implementation.

### Intern

*Qihoo Inc.*

June 2023 - July 2023

- Replicated known exploitation in IoT devices.
- Mined several new vulnerabilities in the latest routers.

### Research Assistant

*Storage Research Group, Tsinghua University*

Jan. 2022 – Mar. 2023

*Advised by Prof. Youyou Lu*

- Explored user-level scheduling methods in hybrid transactional/analytical processing (HTAP) systems.
- Achieved lower latency of AP while maintaining high throughput of TP.
- Responsible for system design and implementation.

### Research Assistant

*Institute of Trustworthy Networks and Systems, Tsinghua University*

Sept. 2020 – Jan. 2021

*Advised by Prof. Jiliang Wang*

- Explored indoor positioning approaches with new generations of Wi-Fi NICs capable of Fine Timing Measurement (FTM).
- Responsible for writing a program to interact with NIC drivers, retrieve FTM statistics, and perform positioning.

## PUBLICATIONS

---

Qinbin Li\*, **Yesheng Liang\***, Yiqun Diao, Chulin Xie, Bo Li, Bingsheng He, Dawn Song, “Tree-as-a-Prompt: Towards Integration of Large Language Models and Decision Trees for Relational Data”, **submitted to VLDB 2024**

## SELECTED PROJECTS

---

**Whiz Reader** An iOS PDF reader that provides convenient translation. Reached 30,000+ purchases on the App Store and received 600+ ratings. [\[Link\]](#)

**MkDocs Blogging Plugin** An open-sourced blogging plugin for the static site generator MkDocs. Reached 6,000+ downloads per month on PyPI and 80+ stars on GitHub. [\[Link\]](#)

**RISC-V CPU** 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 capable of running a simple educational operating system (uCore). [\[Link\]](#)

**DBMS** A built-from-scratch database management system that supports most of the basic SQL and advanced features including indexing and table joins. [\[Link\]](#)

## HONORS AND AWARDS

---

- Academic Excellence Scholarship, Tsinghua University, 2023.
- Academic Improvement Scholarship, Tsinghua University, 2022.
- Social Work Excellence Scholarship, Tsinghua University, 2020.

## SKILLS

---

**Languages** C/C++, Python, Rust, Go, Swift, JavaScript, Bash, SQL, VHDL, SystemVerilog

**Tools** Git, L<sup>A</sup>T<sub>E</sub>X, Docker, Make, CMake, Bazel

*Last updated at **December 14, 2023***