



Liangsheng Yin

Undergraduate Student

Education

2021–Present **B.S, Computer Science**, *Shanghai Jiao Tong University*
SJTU ACM Honor Class in Zhiyuan College

Experience

2023–Present **Research Intern**, *LMSYS*
Working with Lianmin Zheng from UC Berkeley and Ying Sheng from Stanford.

Publications

2023 **Efficiently Programming Large Language Models using SGLang**
Lianmin Zheng*, **Liangsheng Yin**, Zhiqiang Xie, Jeff Huang, Chuyue Sun, Cody Hao Yu, Shiyi Cao, Christos Kozyrakis, Ion Stoica, Joseph E. Gonzalez, Clark Barrett, Ying Sheng*

Projects

2023 **SGLang**
A structured generation language designed for large language models (LLMs) makes the interaction with models faster and more controllable.

Schoolwork Projects

2022 **Mx Compiler**

- Designed and implemented a compiler for the Mx language, which is akin to C++/Java, using Java.
- Utilized LLVM Intermediate Representation (IR) and implemented various optimizations including ADCE, CSE, and LICM.

2022 **CPU on FPGA**

- Developed a CPU based on the tomasulo superscalar architecture.
- Implemented the CPU in Verilog and successfully deployed it on an FPGA platform.

2023 **rCore OS**

- Engineered a simple yet robust operating system (OS) kernel in Rust.
- Implemented critical features such as virtual memory management and process scheduling.

2023 **TRA Synchronizer**

- Developed a distributed file synchronization tool in Rust.
- Employed vector time pairs as an innovative approach for synchronization, ensuring no false conflicts during the process.

Awards and Honors

2019 **Silver Medal**, *National Olympiad in Informatics*, Rank 111 out of all contestants

2021 **Silver Medal**, *ICPC Shanghai Region*

2023 **Finalist Prize**, *Mathematical Contest In Modeling*, Top 3% among all teams

Scholarships

2021-2023 **Zhiyuan Honors Scholarship**

Top 5% in SJTU each year.

2022-2023 **Academic Excellence Scholarship**

2022 **Longfor Scholarship**

Merit-Based Scholarship.

2023 **Foresight-Sequoia Scholarship**

70 winners in SJTU each year.