

XINYU MAO

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Website: <https://sparkmxy.github.io>

EDUCATION

Shanghai Jiao Tong University

Aug. 2018 – Present

Undergraduate, major in Computer Science

A member of ACM Honor Class, Zhiyuan College

GPA: 3.93 / 4.3 | Ranking: 6 / 33

Shanghai, China

RESEARCH EXPERIENCE

University of Southern California

July 2021 - Present

Research Intern advised by Prof. Jiapeng Zhang

Research Topic: computational foundations of cryptography

Shanghai Jiao Tong University

Sept. 2020 – June 2021

Undergraduate Researcher advised By Prof. Shengli Liu

Research Topic: public-key cryptography

PROJECTS

Compiler for Mx* Language | Github repo

Spring 2020

Written in C++ from scratch.

It translates a Java-like language to assembly language programs on the RISC-V architecture.

DHT | GitHub repo

Fall 2019

An Implementation of Distributed Hash Table with basic functions, written in go-lang.

RISC-V CPU | GitHub repo

Fall 2019

A simplified 5-stage-pipeline user RISC-V CPU written in Verilog.

HONORS AND AWARDS

Foresight-Sequoia Scholarship

2021

70 winners in SJTU each year

Huawei Scholarship

2020

14 winners at Zhiyuan College each year

Zhiyuan Honorary Scholarship

2018, 2019, 2020

Top 5% in SJTU each year

Bronze Medal

2017

The 34th China National Olympiad in Informatics (NOI)

TEACHING EXPERIENCE

Great Ideas in Computer Science

Fall 2019, Fall 2020, Fall 2021

Teaching Assistant

I led a TA team, and I was deeply involved in the course design.

I gave lectures on various topics.

I wrote an Enigma Simulator to facilitate teaching.

Shanghai Jiao Tong University

SKILLS

Programming: C++, Java, Python, JavaScript, Latex

Courses with A+ grade: Linear Algebra, Mathematical Logic, Probability Theory, Computational Complexity, Quantum Computing, Algorithm Analysis, Advanced Algorithm, Combinatorics, Graph and Network