Yanning Chen

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Education

Ph.D. Student, Computer Science.

Sep 2024 — Now

University of Toronto, Toronto, Canada.

Advisor: Ningning Xie, Fan Long

B. Eng, Computer Science and Technology.

Sep 2019 - Jun 2024

Shanghai Jiao Tong University, Shanghai, China.

Positions

Research Intern. Sep 2023 – Jan 2024

University of Santa Barbara, Santa Barbara, CA.

Advisor: Yu Feng

Student Researcher. Apr 2020 — Jun 2024

Shanghai Jiao Tong University, Shanghai, China. Advisor: Qinxiang Cao

Software Engineer Intern. Sep 2020 — Dec 2020

Linux Foundation, Remote.

Mentor: PingCAP

Publications

Junrui Liu, Jiaxin Song, Yanning Chen, Hanzhi Liu, Hongbo Wen, Luke Pearson, Yanju Chen, Yu Feng. Tabby: A Synthesis-Aided Compiler for High-Performance Zero-Knowledge Proof Circuits. Object-oriented Programming, Systems, Languages, and Applications 2025

Junrui Liu, Jiaxin Song, Yanning Chen, Hanzhi Liu, Hongbo Wen, Yanju Chen, Yu Feng. Tessel: An Optimizing Compiler for Efficient Zero-Knowledge Circuits. The Science of Blockchain Conference 2025

Teaching

Teaching Assistant. Winter 2025

CSC2125H: Blockchain Technology and Engineering.

Teaching Assistant. Fall 2024

CSC324: Principles of Programming Languages.

Skills & Interests

- Research Interests: Substructural Type Systems, Effects, Row Types
- Programming Languages: Lean, Coq, Rust, OCaml, Python, Golang, C/C++, Java