Zhengyi Han

hanzy@pku.edu.cn · (+86) 18813023182 ·
Personal Website: https://pkucshzy.github.io ·

Education

Peking University, Beijing **Sep 2019 - July 2023 (expected)**
BS in computer science and technology, EECS Overall GPA: 3.41/4.00

Research Interests

- Quantum Computation (Quantum Algorithm for Algebraic Problems, Quantum Walk)
- Quantum Information and Quantum Complexity

Research Experience

Research on Quantum Algorithms for Number Theory **Jun 2021 - Jan 2022**
Undergraduate Research Student Advisor: Tongyang Li

- Attempt to improve Helfgott's sieve method using techniques of quantum algorithms, design a quantum algorithm for Zeta function, and entend the quantum Fourier Transform to local fields.

Research on Quantum Algorithms for Supersingular Isogeny Problem **Jan 2022 - Oct 2022**
Undergraduate Research Student Advisor: Tongyang Li

- **Quantum Algorithms for Supersingular Isogeny Problems.** Use varieties of techniques of quantum algorithms to solve the supersingular isogeny problems of elliptic curves, and compare recent methods.

Research on the Compression Theorem for non-local games **Aug 2022 - present**
Undergraduate Research Student Advisor: Zhengfeng Ji

Academic Experience

Seminar on Theoretical Computer Science, Peking University **Mar 2021 - Jul 2021**
Summer School on QCQI, USTC **Jul 2021 - Jul 2021**
Seminar on the Quantum Walk, Chinese Academy of Science **Sept 2021 - Jul 2022**
Seminar on Probabilistic Proofs, Tsinghua University **Mar 2022 - Jun 2022**

- The seminar is about varieties of classic interactive proof, organized by Zhengfeng Ji.

Seminar on the Coding Theory, Tsinghua University **Sept 2022 - present**

- The seminar is about both classic and quantum coding theory, organized by Zhengfeng Ji.

Subreviewer in QIP 2023 **Oct 2022**
Seminar on the computation and Physics, Peking University **2022 Winter**

- The seminar is organized by **myself**. The website is **here**.

Honors and Awards

- Beijing Municipality, **Beijing Innovative Talent Project for Undergraduate**.

Skills & Interests

- **Programming Languages:** C/C++, Python, R, LaTeX, HTML, CSS, Mathematica
- **Personal Interests:** Math books, badminton, table tennis, stroll, singing, and literature.