Longcheng Li

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Education

University of Cambridge, Cambridge, UK	Jan 2026 –

- PhD in Computer Science   Supervisor: Tom Gur

University of Chinese Academy of Sciences, Beijing, China	Sep 2022 – Jun 2025

- MS in Computer Science   GPA: 3.93/4.0   Supervisor: Jialin Zhang

University of Chinese Academy of Sciences, Beijing, China	Sep 2018 – Jun 2022

- BS in Computer Science   GPA: 3.92/4.0   Rank 2/104

Publications

*Authors are listed in alphabetical order unless specified otherwise.

1. **Logical Operations with a Dynamical Qubit in Floquet-Bacon-Shor Code**   [🔗]
   Xuandong Sun, **L. Li** (co-first author), Zhiyi Wu, et al.
   Physical Review Letters, 135, 220601 (2025)

2. **Toward the Impossibility of Perfect Complete Quantum PKE from OWFs**   [🔗]
   L. Li, Qian Li, Xingjian Li, Qipeng Liu
   Innovations in Theoretical Computer Science (ITCS), 2025

3. **Quantum Byzantine Agreement Against Full-Information Adversary**   [▶] [🔗]
   L. Li, Xiaoming Sun, Jiadong Zhu
   International Symposium on Distributed Computing (DISC), 2024

4. **How (not) to Build Quantum PKE in Minicrypt**   [🔗]
   L. Li, Qian Li, Xingjian Li, Qipeng Liu
   Annual International Cryptology Conference (CRYPTO), 2024

5. **Fast exact synthesis of two-qubit unitaries using a near-minimum number of T gates**   [🔗]
   L. Li (first author), Cheng Guo, Qian Li, Xiaoming Sun
   Physical Review A, 107 (4), 042424 (2023)

Teaching

Teaching Assistant of *Combinatorics*	UCAS, Fall 2023
Teaching Assistant of *Introduction to Computer Science*	UCAS, Spring 2020

Visiting

Southern University of Science and Technology, Shenzhen, China	Mar 2024 - Jun 2024

- Visiting Student on quantum error correction   Advisor: Youpeng Zhong

National University of Singapore, Singapore	Aug 2021 - Dec 2021

- Non-Graduating Programme (Coursework)

Awards

National Scholarship	Nov 2024
Silver Medal, *45th International Collegiate Programming Contest Asia East-Continent Final*	Apr 2021

Skills

Coding: C/C++, Python, HTML/CSS/JS
English: TOEFL 106/120 (Reading 30, Listening 28, Speaking 23, Writing 25)