Xian Wu.

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Research Interest

Quantum Computation, Quantum Circuit Synthesis, Machine Learning, Quantum Architecture.

Education

2024.9 – now — **PhD in Artificial Intelligence**.
Hong Kong University of Science and Technology (Guangzhou)

- Mentor: Prof. Xin Wang

- Focus areas: Quantum Computing, Quantum Architecture, Artificial Intelligence

2021.9 – 2024.6 — **MSc in Computer Science**.
Sun Yat-sen University.

- Mentor: Prof. Lvzhou Li

- Focus areas: Quantum computing, Quantum circuit synthesis

2017.9 – 2021.6 — **BSc in Computer Science**.
Sun Yat-sen University.

- Focus areas: Machine Learning

Experience

2023.9 – 2024.8 — **Hong Kong University of Science and Technology (Guangzhou)**.
Research Assistant
Supervisor: Prof. Xin Wang

- Participate in the development of Avocado (A quantum computation platform).

- Conduct various research in quantum architecture, tensor network and magic state distillation.

2021.3 – 2021.6 — **Sun Yat-sen University**.
Research Assistant
Mentor: Prof. Lvzhou Li

- Participate in research on linear reversible circuit synthesis and program implementation.

- Learn fundamental knowledge about quantum computing. Use Qpanda to implement some well known algorithm, like Grover search algorthm, Quantum Fourier Transform (QFT).

Research Publications

Lvzhou Li, **Xian Wu**. Asymptotically optimal synthesis of reversible circuits[J]. arXiv preprint arXiv:2302.06074, 2023. (Alphabetic order)

Xian Wu, Chenghong Zhu, Jingbo Wang, Xin Wang. (Under review).

Chenghong Zhu, **Xian Wu**, Zhixin Song, Jingbo Wang, Xin Wang. (Under review)

Skills

Languages	■	Strong reading, writing and speaking competencies for English, Mandarin Chinese, Cantonese.
Coding	■	C++, Python, Matlab, LaTeX…
Databases	■	MySQL.
Misc.	■	Academic research, teaching, training, consultation, LaTeX typesetting and publishing.

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2022.8	■	**First prize of the 1-st Sinan Cup** CCF "Sinan Cup" Quantum Computing Programming Challenge

References

Prof. Lvzhou Li   Department of Computer Science,
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