

KAICHU CHEN

+86-17268617326 [◇ chandler.kc.chen@gmail.com](mailto:chandler.kc.chen@gmail.com) [◇ github](#)

Xi'an Jiaotong University, No.28, Xianning West Road, Xi'an, Shaanxi, 710049, P.R. China

EDUCATION

Xi'an Jiaotong University

Xi'an, China

B.S. in Physics, Quantum Information
(Strengthening Basic Disciplines Program)

Aug. 2020 – Present

B.S. in Finance (minor)

Feb. 2022 – Present

GPA: 86/100

Ranking: Top 3 of 22

(rankings are not accessible currently)

RESEARCH INTERESTS

quantum information, quantum computing, quantum algorithms and quantum machine learning.

RELATED COURSEWORK

- Computational Physics: 96/100
- Quantum Mechanics: 89/100
- Opto-electronics: 95/100

RELATED EXPERIENCE

Quantum Devices Research Training

- Implement images denoising with FFT in matlab.
- Mentor: Spintronic Materials and Quantum Devices Research Center, Tao Li
- January 2021-March 2021

Quantum Resource Theory Salon

- Improve research capacities in latex and endnote; Discuss around the foundation of quantum resource theory including classification, transformation, measurement and so on.
- Mentor: Quan Quan
- March 2021-June 2021

Arduino

- Implement alarm, intelligent switch door system and website construction with Arduino.
- Mentor: Hai Wang
- June 2021-July 2021

Quantum Metrology Research Training

- Study around quantum optics and NV center system; Implement a proof-of-concept gyroscope based on Nitrogen nuclear spin in NV system that measuring rotation speed in double quantum Ramsey precession.
- Mentor: Pengbo, Li
- November 2021-Now

Quantum Summer Seminar of USTC

- Discuss and research around Quantum Computation and Quantum Information, Neilson & Chuang and pioneering papers in the field of quantum information and quantum computing.
- Mentor: Zhaofeng Su

- July 2022-October 2022

Quantum Foundations Research

- Push forward an approach for quantitatively analyzing the genuine tripartite nonlocality of general three-qubit states and canonical forms of quantum states under local operations.
- Mentor: Zhaofeng Su
- October 2022-Now

Final Coursework of Electrodynamics Course

- Presentation about Josephson junction, superconducting quantum interference Device and superconducting quantum computation systems.
- Mentor: Hongfei Zhang

Final Coursework of Opto-Electronics Course

- Presentation about application of NV center to quantum computation.
- Mentor: Hong Gao

Final Coursework of Computation Physics Course

- Implement semiclassical quantization of molecular vibrations that uses appropriate integral function and root function in matlab; Implement numerical analysis of white dwarf models in matlab.
- Mentor: Jianxing Li

Final Coursework of AI course (in progress)

- Implement an intelligent Go program that uses MinMax and Alpha Pruning algorithms in Python to achieve the optimal Go strategy and defeat robots and competitors; Presentation about HHL algorithm and Quantum SVM algorithm.
- Mentor: Hui Cao

The Third Prize Scholarship

XJTU; 2020-2021, 2021-2022

SKILLS

Languages	C, Python, Matlab, Latex
Tools	Comsol, Origin, Endnote, Github
Soft Skills	Time Management, Communication, Problem Solving, Accountability

PERSONAL

Club	Karate, Robomaster, Table tennis
Volunteer	National College Physics Experiment Competition