

Morre Zhao Enhao

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Place of birth: Nanjing, Jiangsu, China * *Date of birth:* 07-11-2002

Education

Bachelor's degree in Computer Science and Economics *Peking University*
double major, admitted to honor-track class for AI and computing *September 2021 - June 2025*
Related Courses: Advanced Mathematics, Mathematics Analysis, Numerical Analysis, Introduction to Artificial Intelligence, Introduction to Computer System, Introduction to Computing, Data Structure and Algorithm, Probability and Statistics
current overall GPA: 3.76/4.00

Exchange to Department of Engineering, Computer Science *The University of Hong Kong*
Exchange program, Full scholarship *September 2023 - December 2023(expect)*
Related Courses: Computer Network, Computer architecture, Discrete Mathematics, Statistic Learning, Abstract Algebra
exchange overall GPA: 3.92/4.30

Research and Intern experience

AI For Science Institution *July 2022 - September 2022*
Prof T. Zhang Group *Beijing, China*

- Use Deep Learning method and genetic algorithm to simplify Chemical mechanism of combustion.
- Use Cantera to calculate the chemical reaction fluxes and visualize them.
- Grouping the chemical reactions and use sensitivity analysis to judge the importance of chemical reactions.

Peking University *February 2023 - May 2023*
Research Rotation *Beijing, China*

- Research Focus: AI for Finance and AI for Science.
- Repeat the result of the paper Relation-Aware Transformer for Portfolio Policy Learning. Lecture papers in group meetings: Ground State Energy Functional with Hartree-Fock Efficiency and Chemical Accuracy. Use deep-learning method to solve electronic structure and molecular dynamics problems.

The University of Hong Kong *September 2023 - December 2023*
Research Assistant, Advised by Prof Zhao Qi *Hong Kong, China*

- Research Focus: Quantum Computation and Quantum Simulation.
- Using Google's OpenFermion framework and scientific computing packages PySCF, the Hamiltonian of water and hydrogen chains is calculated to explore the influence of grouping and exchange order on simulation accuracy.

Reward and Activities

Chinese Chemistry Olympics: Gold Medalist *November 2020*
Hangzhou, Zhejiang, China
Awarded by Chinese Chemical Society

China Merchants Securities Scholarship and Academic Merit Award *June 2022*
Beijing, China

Awarded by Peking University

Skills

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| Programming Languages/Tools | C, C++, Python(Numpy,Pandas,Pytorch), L ^A T _E X, Linux |
| English Proficiencies | CET6: 632, TOEFL: 94 |

Publication

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| Paper | A deep learning-based model reduction (DeepMR) method for simplifying chemical kinetics, Combustion and Flame(2024) |
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Memberships

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| Peking University | Algorithm Association |
| Collage of EECS | Tennis Team |