ZiAng Yang

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PROFILE

Undergraduate student at Peking University majoring in Theoretical and Applied Mechanics, with a strong interest in fluid mechanics and its applications. I have gained hands-on research experience through two projects, which has helped me develop foundational research skills. Motivated to pursue a PhD in a related field starting in 2025.

EDUCATION

Peking University, China ***Jun. 2021 - Jun.2025***
B.S. in Engineering

HONORS / AWARDS

Undergraduate Scholarship, Peking University (2022,2023)

RESEARCH EXPERIENCE

Peking university, Professor Jin-Han Xie's group
Laboratory team member ***Mar .2024 – Oct .2024***

In the field of environmental fluid mechanics, this research investigates how topography at various scales influences energy transfer across different scales in two-dimensional turbulence, grounded in turbulence theory. More details can be found on my website.

Through this research, I gained an understanding of the fundamentals of turbulence theory, learned various mathematical methods for studying turbulence, and applied them in practice.

An undergraduate research report related to this topic is expected to be completed by February 2025.

Peking university, Professor Yue Yang's group
Laboratory team member ***Dec. 2023 – Oct. 2024***

Under the guidance of the professor, I conducted studies on two topics: the first is the application of artificial intelligence to address prompt word issues in computational fluid dynamics; the second involves exploring quantum computing methods to solve fluid mechanics

problems, such as recovering fluid motion from its quantum state and linearizing and Schrödingerizing equations for compatibility with quantum computing. More details can be found on my website.

Through my research, I have gained new insights into computational fluid dynamics and mastered various relevant numerical methods.

Some preliminary results have been achieved, which are expected to be presented in my graduation thesis.

SKILLS

basic numerical methods, fluid mechanics, and applied mathematics

Programming: Python, MATLAB, C, LATEX

Language skills: English(fluent), Chinese(native)