

JINGZHE SHI

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EDUCATION BACKGROUND

No.2 High School of East China Normal University

Sep. 2018 - Jun. 2021

- Top student in the Class of Fundamental Science

Yao Class, HKS, Tsinghua University

Sep. 2021-Present

- Recommended to Yao Class due to extraordinary performance in physics competition
- Cumulative GPA : 3.85/4.0, Specialized GPA: 3.90/4.0

Jacobs School of Engineering, UC San Diego

Feb. 2024 - Jun. 2024

- Visiting Scholar, advised by Xiaolong Wang

HONORS AND AWARDS

Recipient of First-Class Freshmen Scholarship of Tsinghua University

Gold Medal winner in the 51st International Physics Olympiad (IPhO 2021), **ranking 10th globally**

RESEARCH EXPERIENCE (CURRENTLY PUBLICLY AVAILABLE WORKS ONLY)

(* for equal contribution)

Scaling Law for Time Series Forecasting

Jan. 2024 - May. 2024

Jingzhe Shi, Qinwei Ma*, Huan Ma, Lei Li*

- Accepted by **NeurIPS 2024** (the 38th Annual Conference on Neural Information Processing Systems (main track), acceptance rate: 25.8%). ArXiv link: <https://arxiv.org/abs/2405.15124>.
- Proposing Scaling Law for Time Series Forecasting from both theoretical and experimental perspective. Taking into account the impact of look-back context length.
- Showing both theoretically and empirically that long context length may hurt performance in TSF.
- Personal Contribution: Proposing the idea and be responsible for a rough theoretical framework and all the experiments.

CHOPS: CHat with custOmer Profile Systems for Customer Service with LLMs

Sep. 2023 - Feb. 2024

Jingzhe Shi, Jialuo Li, Qinwei Ma, Zaiwen Yang, Huan Ma, Lei Li

- Accepted by **COLM 2024** (the 1st Conference on Language Modeling, acceptance rate: 28.8%). ArXiv link: <https://arxiv.org/abs/2404.01343>.
- Proposing an agent-based architecture for leveraging large and small LLMs in Customer Service, providing effective performance/cost trade-off.
- Proposing a Dataset with Database, APIs, guiding files and QA pairs for Customer Service collected from CPHOS, a real-scenario of online Physics Olympiad.

Large Trajectory Models are Scalable Motion Predictors and Planners

Aug. 2023 - Oct. 2023

Qiao Sun, Shiduo Zhang, Danjiao Ma, Jingzhe Shi, Derun Li, Simian Luo, Yu Wang, Ningyi Xu, Guangzhi Cao, Hang Zhao

- ArXiv link: <https://arxiv.org/abs/2310.19620>.
- Leveraging successful backbones in NLP for trajectory prediction, demonstrating scalability on diverse datasets and achieving state-of-the-art performance on Nuplan dataset
- Personal Contribution: Responsible for the decoder part. Utilize DDPM to generate trajectory in Key Point Space to capture multi-modal distribution of future trajectories.

SOCIAL WORK EXPERIENCE

CPHOS

Dec. 2020 - Present

Co-founder, former tech group leader, council member

- CPHOS (<https://cphos.cn>) is an academical nonprofit organization dedicated to providing Physics Olympiad simulations 4-5 times per year for high school contestants for free through an online platform.
- CPHOS was founded in late 2020 by a group of 10 (including myself), now with 100+ members, mainly from top universities in China. 1000+ students from 200+ high schools participate in most Olympiads held by CPHOS.
- I led the tech group to develop tools supporting online Olympiads, including an LLM-based Replyer for Customer Service (**which developed into the CHOPS research project accepted by COLM later**), etc.

Shanghai Qi Zhi Institute

Aug. 2023 - Sep. 2023

Research Intern, Advised by Hang Zhao

- Shanghai Qi Zhi Institute is a Public Institution affiliated to Science and Technology Commission of Shanghai Municipality, led by Andrew Chi-Chih Yao.
- I worked on state transformers for trajectory prediction supported by computational resources at the institute.

SERVICE

Reviewer

- ICLR 2025 reviewer.

IPhO 2022 Marker

Invited online marker for the 52nd International Physics Olympiad (IPhO 2022)

- In 2022 IPhO was held in Switzerland and due to pandemic IPhO had to invite extra markers.
- I was invited and fulfilled my job as an online marker to mark, discuss with my marker partner and to do rebuttals with team leaders from countries and regions all around the world through online meetings.

SKILLS AND OTHERS

Languages: Chinese (native); English (TOEFL: 106); Japanese (daily dialogue).

Programming languages: Python, C/C++, etc.

Tools: Git, LaTeX, SQL, etc.