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**EDUCATIONAL BACKGROUND**

**Peking University** Beijing, China09/2022 – present

* + ***Major in Physics*:**  Grade: **83.4**/100.0

(Consistent improvement from 82.1 in the first semester to 89.3 in the most recent semester; semester Grades: 82.1, 83.6, 79.1, 86.5, 89.3)

* **Advanced Courses:**
* Introduction to Earthquakes (98),
* Introduction to Atmospheric Sciences (97),
* **Thermodynamics** (90),
* **Data Structures and Algorithms (89),**
* **Optics (89),**
* Fundamentals of Modern Electronic Circuits and Experiments (88),
* **Fluid Mechanics** (85),

**REASEARCH INTEREST**

* **Chain-of-Thought Reasoning for Enhancing AI Model Performance.**
* **Detector development.**
* **Reinforcement Learning.**

**REASEARCH EXPERIENCES**

**Research on Chain-of-Thought Reasoning for Advanced Image Generation.** 09/2024–01/2025

(Collaborator: Dr. Renrui Zhang, The Chinese University of Hong Kong)

* Conducted research on applying Chain-of-Thought (CoT) reasoning to autoregressive image generation, focusing on test-time computation and Direct Preference Optimization (DPO).
* Proposed and implemented the Potential Assessment Reward Model (PARM), which adaptively evaluates each generation step by integrating existing reward models.
* Enhanced the Show-o model, achieving a +24% improvement on GenEval and surpassing Stable Diffusion 3 by +15%.
* **Progress:** Accepted by CVPR 2025.

**Data efficiency in reinforcement learning, Reinforcement learning on Hybrid SSM-Transformer model** 03/2025–present

(Collaborator: Prof. Minjia Zhang, *University of Illinois at Urbana-Champaign*)

* Different data have different learning efficiencies, and some data have no gradient contribution in the later stages of a long training cycle. New reinforcement learning methods are being developed based on this..
* **Progress:** Under study.

**Development and data analysis of resistive plate counter** 05/2024–present *(Supervisor:* Prof. Qite Li, Peking University)

* Detector Development.
* Developed and optimized signal processing algorithms to enhance the accuracy and precision of detector data analysis.
* Using reinforcement learning to replace traditional algorithms, reduce the signals required for particle determination, and increase detection efficiency and accuracy.
* **Progress:** Under study.

**PROFESSIONAL SKILLS**

Programming and Software: Python / MATLAB / Mathematica / CERN ROOT / LATEX

Languages: Currently in preparation

**EXPERIENCE**

* [**Shenzhen International Quantum Academy**](https://sziqa.ac.cn/) Visiting Student

**HOBBIES**

* **Anime**
* **Computer Games**