YUCHEN WANG

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EDUCATION

Peking University, Bachelor of Science in Intelligence Science

2021 - 2025(expected)

GPA: 87 (Yr1 84.7, Yr2 88.4, Yr3 87.4)

Rank: Top 20% (6/29)

SELECTED AWARDS

• Zhi Class Scholarship (Top 1%) 2023, 2024

• Outstanding Academic Achievement Award (Top 5%) 2023

• First Prize in Provincial Chinese Mathematical Olympiad(CMO) 2020

SELECTED PROJECTS

• Investigating Prompts for PointCLIP V2

Code & Report: GitHub

This research explores factors contributing to the performance improvement of PointCLIP V2, focusing on the impact of prompt selection on image matching. The study finds that the effectiveness of prompts is highly dependent on the chosen images, rather than merely the capabilities of advanced Large Language Models (LLMs).

• Fast Simulation of Mass-Spring Systems

Code & Report: GitHub

Proposes an accelerated solver based on block coordinate descent for fast and stable simulation of mass-spring systems. This method achieves higher frame rates, providing real-time simulation results while maintaining the stability of the implicit Euler method at a reduced computational cost.

• Seismic Phase Picking

Code: GitHub | Report: arXiv

This research investigates automatic seismic phase picking methods for determining the arrival times of P-waves and S-waves in earthquake monitoring. It compares traditional and learning-based approaches to phase identification, aiming to enhance the scalability of seismic monitoring systems.

• Recent Academic Readings

 $Paper\ Readings$

ACADEMIC SERVICES

Advisor: Prof. Liwei Wang, Peking University

2023.9 - 2024.4

• Explore Model Merging for Large Language Models

Advisor: Prof. Difan Zou, The University of Hong Kong

2024.7 - Present

- Discover the Understanding of In-Context Learning
- Examine Collapse Errors in Diffusion Models Induced by Deterministic Samplers

SKILLS

Programming Languages: Python, PyTorch, C, C++, LATEX

Standard test scores: TOEFL 104 (S21), CET6 590