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

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 Effect of the MLP in Transformers & the Understanding of In-Context Learning for Large Language Models
- 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