Muhan Wang

EDUCATION

Tsinghua University(Yao Class)

2022.8 - Present

B.S. Computer Science

Current GPA:3.94/4.0 Rank 11/94

The High School Affiliated to Renmin University of China

2019.9 - 2022.6

Coursework

Courses: Intro to AI(similar to CS188), NLP(similar to CS224n), Machine Learning, Probability & Statistics, Algorithm Design, Linear Algebra (A) & Abstract Algebra (A), Calculus (A+), Intro to Computer Systems (A), General Physics(Electrodynamics) (A)

AWARDS

First prize in Chinese High School Mathematics League

2019

14 Years old

Overall Scholarship

2023.11

Specific in Tsinghua, mainly focus on academic performance

10000RMB Rank 6/94

S prize in Mathematical Contest In Modeling

2023.1

SKILLS

Languages and Frameworks: Python, Pytorch, C/C++, TypeScript, LATEX

Tools: Git/GitHub, Linux, Slurm, Huggingface, VS Code, PyCharm

RESEARCH EXPERIENCES

3D-Diffusion-Policy | Pointcloud Feature Extraction, Diffusion model, Imitation Learning

2023.9 - 2024.2

- Project for RSS 2024. Hopeful to be the best imitation learning algorithm for 3D input.
- Use 3D feature conditioned diffusion model to generate policy for robot
- Read some papers of pointcloud and diffusion model, and implement them

Text2sql Generation | Finetuning LLM, Parallel Training

2023.11 - Present

- Seek for better sql generation method, using BIRD and Spider Benchmark
- Try to design better prompt and finetune LLM on BIRD dataset
- Learned to use Slurm to schedule GPU resources. Use Huggingface libs like Transformers, Accelerate to train model in parallel

Course Project

Chinese Poem Generation(NLP course Project) | Finetuning LLM, OpenAI API, Frontend

2023.9 - 2023.12

- Developed a web application for poem and illustration generation
- Finetuning ChatCLM on Chinese poem dataset, achieve better generation quality and diversity
- Design prompt and integrated OpenAI API to generate illustration for poem

OTHER EXPERIENCES

SJTU-THU-PKU summer school | Member

2023.7

Summer school hosted by SJTU and Shanghai AI Lab, focusing on AI and cyptography. Give a presentation on Diffusion models.

CS Practice Detachment | Member

2023.7

Visitied many AI enterprises and labs, academic institutions. Such as Microsoft, Baidu, Shanghai AI Lab, etc.

THU Blockchain Assocation | Core, Tutor

2023.9 - Present

Gave a presentation on MPCformer, private infenrence on transformers. MPCFormer