JiaMing Shen

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Education

Tsinghua University
Sept 2021 – June
2025(expected)

Major: Computer Science and Technology, Minor: Statistics

• GPA: 3.96/4.0

• Selective Coursework: Fundamentals of Programming(A), Discrete Mathematics (1, 2) (A), Introduction to Computer Systems(A), Principles and Practice of Compiler Construction(A), Computer Organization(A), Cybersecurity Fundamentals(A+), Database Special Topic Training(A+), Data Mining(A), Introduction to Machine Learning(A)

Experience

Intern, MSR AI for Science

June 2024 - December 2024

- Improve the Ewald MP method to make it equivariant and fix problems in the original code
- Test in different molecular systems to explore the role of long-range modules

Partcipant of Academic Rising Stars Program, Tsinghua University

July 2023 - Oct 2023

- Multi-task learning of proteins based on heterogeneous graphs
- Finding datasets about proteins and adding researched datasets to new datasets allows the model to complete multi-task learning
- Run the single-task experiment and compare the results of the single-task experiment with the multi-task experiment

Rising Stars Program "Basic Models" Special Project, Tsinghua University

July 2023 - Aug 2023

- Lecture + Hackathon
- Gained a basic understanding of large language models
- Understood the LLM architecture and the application of large models in other tasks (multimodal model, protein language model). Had experience of finetuning

Partcipant of Academic Rising Stars Program, Tsinghua University

Nov 2022 - May 2022

- AI for Medical Image
- Segmentation of bone rings in CT images using traditional image segmentation methods and neural network methods

Publications

HeMeNet: Heterogeneous Multichannel Equivariant Network for Protein Multitask Learning

Apr 2024

Rong Han, Wenbing Huang, Lingxiao Luo, Xinyan Han, Jiaming Shen, Zhiqiang Zhang, Jun Zhou, Ting Chen

Projects

HuaDB link

• Database course project

EAM system link

• Software Engineering project: Enterprise management system

Connect4 link

• Deciding the next position of an online game using the MCTS algorithm

Blogs website link

• Building web pages based on crawled data via Django

Chinese Draughts • An online Chinese draughts game using Qt Honors Academic Excellence Scholarship in Tsinghua University(top 5%) Academic Excellence Scholarship in Tsinghua University(top 20%) Technologies

Programming Languages: C++,C, Python, JS/TS, SystemVerilog, VHDL, R

Frameworks: QT, Django, React, PyTorch

Tools: Linux,Git, LeTeX, Docker