Qiao Sun

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EDUCATION

2024.09-Present Massachusetts Institute of Technology Undergraduate

Double major in Mathematics and Artificial Intelligence + Decision Making (Expected Graduation Year: 2028)

2023.09-2024.07 Tsinghua University Pre-college

• Institute for Interdisciplinary Information Sciences

RESEARCH EXPERIENCE

2024.09-Present MITCSAIL Professor: Kaiming He

- Work as a UROP student at Prof. He's computer vision group
- Topic: Generative models, mainly on Diffusion models and unconditional image generation

CERTIFICATES AND HONORS

2023 Gold Medal & 11th Place in 2023 International Mathematics Olympiad

2022 Gold Medal & 1st Place with Perfect Score in 2022 Chinese Mathematics Olympiad

2022&2023&2024 Excellent Award in Alibaba Global Mathematics Competition, Top 70 out of 50,000+ participants

PROJECTS

- Final project for the course Introduction to LLM Application at IIIS, Tsinghua University, completed in a team of 3
- Build a pipeline of Large Language Models to generate an image according to the content of a piece of music
- Achieve high correlation between the contents and rather high speed of generation
- Use Docker to build an API on Kubernetes server and use gradio to build up a website for the application

COURSES AND GRADES

Semester	Course Title	Grade
2023-Fall	Calculus A (1)	A-
At Tsinghua	Situation and Policy (1)	Р
University	Linear Algebra	A+
	Introduction to Computer Science	Α
	Algorithm Design	А
	Introduction to Programming in C/C++	A+
2024-Spring	General Physics (1)	А
At Tsinghua	Theory of Computation	A+
University	Introduction to Computer Systems	А
	Mathematics for Computer Science and Artificial Intelligence	A+
	Introduction to Large Language Model Applications	Α
2024-Fall	Intro to Solid-State Chemistry	Р
At MIT	Intro to CS Prog in Python	Р
	Machine Learning (Grad version)	Р
	Introductory Biology	Р
	Physics I	Р
	Physics II	Р
	Calculus I	Р
	Calculus II	Р
	Quantum Computation	Р
	Algebraic Topology I	Р

SKILLS

- Programming skills: Prominent in C, python; familiar with Pytorch and Jax dev environment
- Language: English (fluent), Chinese (native)