



个人简历

personal resume



Sining Zhoubian



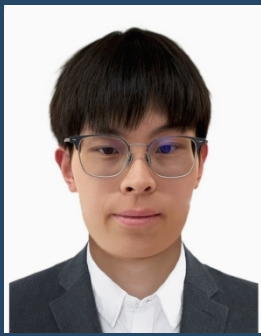
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Graduate



Age: 23



Beijing, China



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Language Models

C++/C

Python

Database

Personal Resume

Skills: Deep Learning, Python(torch), C++, Statistics, Data Analysis, LLM, NLP tasks, RL algorithms, Quant



Educational Background

2021.9~2025.7 Bachelor at Weiyang College, Tsinghua University

Major: Basic Science of Mathematics and Physics

GPA credits: 3.85/4

2025.7~Now Master at THUCS

Major: Artificial Intelligence, at Tsinghua KEG lab

Advisor: Prof. Jie Tang



Research Experience

- **2023.7~now** -- Internship at ZhipuAI (北京智谱华章科技股份有限公司), conduct research on LLM reasoning algorithms, optimization paradigms for post-training and LLM agents.
- **2023.6~2024.1** -- Research on SciGLM(Large Language Model for Science) at KEG.
- **2023.6~2023.7** -- Oxford Summer Programme, CV research-Image classification based on Resnet and bottleneck transformers.



Achievements & Awards

2022 The Chinese Mathematics Competition 1st Prize

2024 MCM(Mathematical Contest in Modeling) Meritorious Winner Prize CET4: 671、CET6: 629、TOEFL: 101

The Santander Scholarship (2023)

The Scholarship of Scientific and Technological Innovation(2023, 2024)

Representative Work: see Google Scholar page -- [Google Scholar](#)

SciGLM (NIPS 24 DB Track) -- <https://arxiv.org/abs/2401.07950>

ReST-MCTS* (NIPS 24) -- <https://arxiv.org/abs/2406.03816>

DataSciBench (ACL 26) -- <https://arxiv.org/abs/2502.13897>

ReST-RL -- <https://arxiv.org/abs/2508.19576>

Confident-Decoding (EMNLP 26) -- <https://arxiv.org/abs/2606.21906>

LLM Memory Survey -- <https://arxiv.org/abs/2607.25380>



Self Evaluation

- Self motivated on research and technology, always interested in AI and quant finance.
- Have various experiences in LLM research, good in Python coding.
- Highly motivated to explore cutting-edge issues.
- Decent mathematical basics and competition experience.

自荐书

Letter of self recommendation

Dear Professor/Tutor/HR,

My name is Sining Zhoubian, I'm currently a master student of Department of Computer Science and Technology, Tsinghua University. I major in **Artificial Intelligence**.

Concerning my studies, I acquire a GPA of 3.85/4 during my undergraduate period, which is outstanding within Tsinghua. I've successfully finished studying most of the main courses of my major and computer science, including Calculus, Linear Algebra, Probability Theory, Statistical Inference, Numerical Analysis, Stochastic Process, Computer Networks, Data Structures, etc. Thus my mathematics and computer skills is substantial.

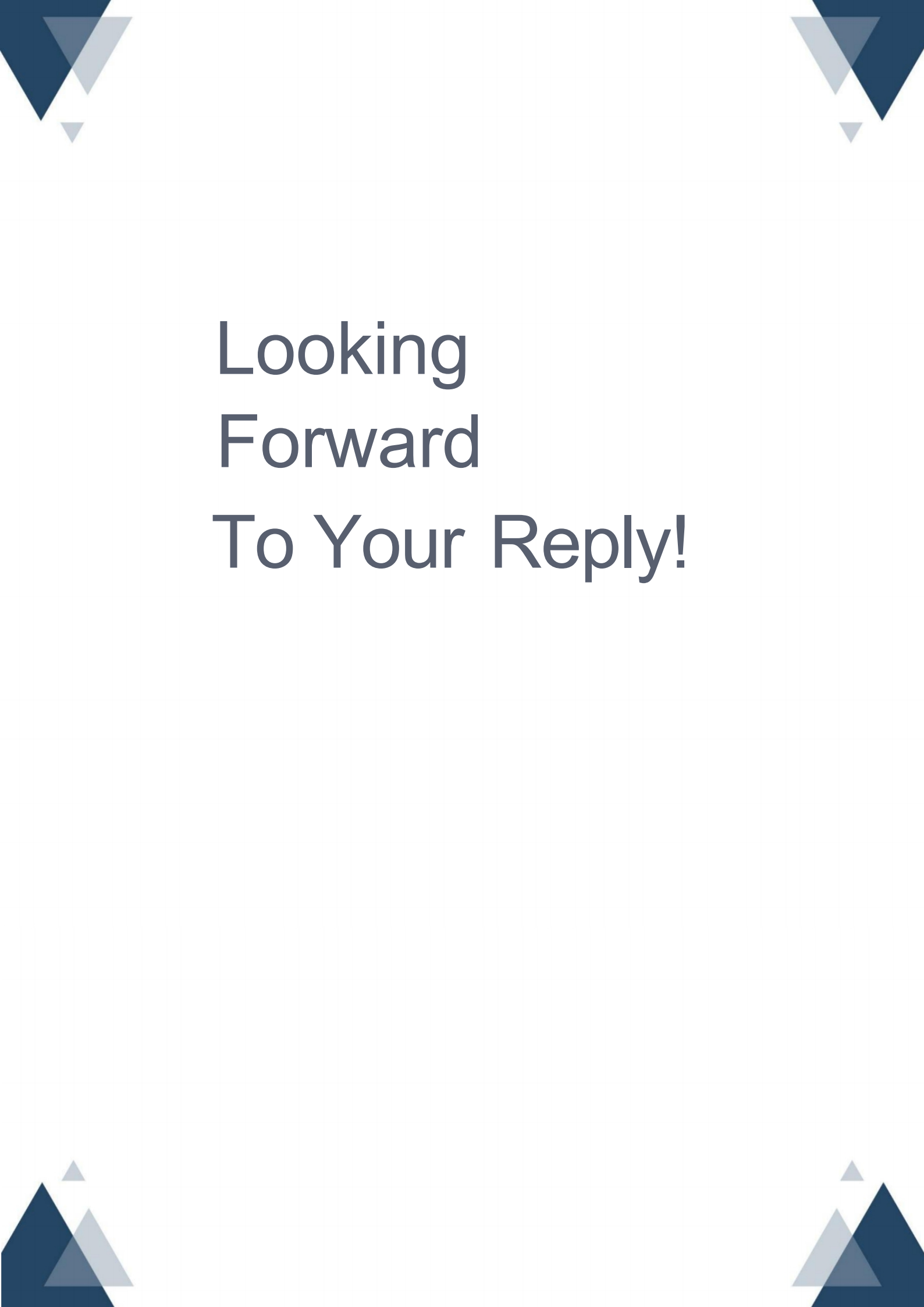
I participate in various research programs relevant to machine learning. In 2022, I took part in a Student Research Training (SRT) programme in Tsinghua themed **Smart geotechnical early warning system based on LSTM**. This was my first contact with ML and I was fascinated by its strong power in technical problems. So I dug deeper into the theorems behind neural networks. In 2023 summer, I enrolled in the **Oxford Study Abroad Programme**. I took a course of AI&ML and did some research in image classifications based on CNNs, yielding an project essay about **Image classification with attention-based Resnet**. I also participated in a research programme led by Institute for **AI Industry Research(AIR)**. The programme's main goal is to build a pipeline to generate new medicine molecules with the assistance of AI. I did some investigation on building the **generative model for molecule linker design based on diffusion**. Besides, I joined the **Tsinghua KEG lab** to conduct further research on Large Language Models. Following Prof. Jie Tang and Dan Zhang, I deeply engaged in the development of **SciGLM, a scientific LLM similar to Galactica**. Our model is finetuned based on ChatGLM, equipped with some prompt techniques, SFT methods and special designed datasets. I participated in multiple procedures like **reward model training, model finetuning, prompt designing and data processing**, which significantly enhanced my skills and enriched my experiences in relevant tasks. Moreover, I also started an internship at **ZhipuAI**, the AI company who developed ChatGLM basemodel series. I led the research on LLM reasoning, improving search algorithms like **Tree of Thought and Monte-Carlo Tree Search**. Our approach **ReST-MCTS*** enhanced various models' reasoning ability upon various scientific and math benchmarks. It also demonstrated strong ability for iterative LLM self-train. In Feb 2024, I again led a team in MCM and designed a **Markov-Chain model for prediction**. More recently, I have been working on DataSciBench, a dataset development initiative for data science, to establish benchmarks for complex, long-term data science tasks. Additionally, building on my previous work on ReST-MCTS*, I further proposed ReST-RL, a self-training paradigm for large language models (LLMs). This framework enables the model to automatically search for high-value subspaces to select training data and trains a dedicated value model (VM) to assist with decoding, thereby addressing performance limitations in algorithms such as GRPO. Recently, I have also been exploring memory architectures and layerwise reasoning dynamics for LLMs.

I also obtained a few achievements and won some scholarships. For instance, I won the first prize in The Chinese Mathematics Competition, 2024 MCM Meritorious Winner Prize and the 11th Tsinghua iCenter Quantitative Strategy Invitational Competition 2nd prize. I also won the Santander scholarship for my performance in the Oxford Study Abroad Programme and the Scholarship of Scientific and Technological Innovation for my researches.

Finally, I want to let you know that I'm really interested in ML, DL and Quant, and I'm always motivated on relevant researches and opportunities. I believe ML can be a powerful tool for plentiful tasks, if designed carefully. With my former experience and coding ability, I believe I'm capable of relevant positions. Thank you for your consideration.

Best regards,

Sining Zhoubian

The image features a light gray background with a subtle grid pattern. In each of the four corners, there are decorative geometric shapes composed of overlapping triangles in dark blue and light gray. The text is centered in the upper half of the image.

Looking
Forward
To Your Reply!