

TIANYU FENG

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Github: fty1777 ◇ Site: <https://fty1777.github.io>

EDUCATION

Beihang University (BUAA) , Beijing, P.R.China	2022.9 - 2024.12
MEng in Computer Science (until 2024 Spring)	GPA: 3.861/4.0, Rank: 18/293 (Top 6%)
Beihang University (BUAA) , Beijing, P.R.China	2018.9 - 2022.6
BEng in Computer Science	GPA: 3.862/4.0, Rank: 6/201 (Top 3%)

RESEARCH INTERESTS

High Performance Computing including sparse computing, scientific computing application optimization and stencil.

Machine Learning Systems (MLSys) including training, inference and model serving systems.

Parallel Computing including CPU, GPU and other many-core processors.

Performance Analysis Tools large-scale performance analysis of programs running among up to thousands of nodes.

PUBLICATIONS

Siqi Wang*, **Tianyu Feng***, Hailong Yang, Xin You, Bangduo Chen, Tongxuan Liu, Zhongzhi Luan, and Depei Qian. *AtRec: Accelerating Recommendation Model Training on CPUs*. In IEEE Transactions on Parallel and Distributed Systems. (TPDS 2024) (* : Equal contribution) (Early Access available)

Tianyu Feng, Siyan Chen, Xin You, Shuzhang Zhong, Hailong Yang, Zhongzhi Luan, and Depei Qian. *dgQuEST: Accelerating Large Scale Quantum Circuit Simulation through Hybrid CPU-GPU Memory Hierarchies*. In Proceedings of Network and Parallel Computing: 18th IFIP WG 10.3 International Conference. (NPC 2021, **Best Paper Award**)

Jianjin Liao, Mingzhen Li, Hailong Yang, Qingxiao Sun, Biao Sun, Jiwei Hao, **Tianyu Feng**, Fengwei Yu, Shengdong Chen, Ye Tao, Zicheng Zhang, Zhongzhi Luan, and Depei Qian. *Exploiting Input Tensor Dynamics in Activation Checkpointing for Efficient Training on GPU*. In Proceedings of 2023 IEEE International Parallel and Distributed Processing Symposium. (IPDPS 2023)

AWARDS AND SCHOLARSHIPS

National Scholarship	2022.10
National Scholarship	2019.10
NPC 2021 Best Paper Award	2021.11
Excellent Undergraduate Thesis Award, Beijing	2022.11
Outstanding Graduate, Beijing	2022.7

(A longer list including competitions is available on my site <https://fty1777.github.io/awards/>)

OTHER EXPERIENCE

R&D Intern, Model training Optimization, MEGVII, Beijing	2023.7 - 2023.11
R&D Intern, High Performance Computing, Sensetime, Beijing	2021.6 - 2021.11

SKILLS AND STANDARDIZED TEST SCORES

Programming Languages, Frameworks and Technical Skills
C/C++, Python, CUDA, MPI, OpenMP, Docker, Linux, PyTorch, TensorFlow, LangChain

TOEFL: 98 **GRE:** 324(V155+Q169+W3.5)