TIANYU FENG

Phone: (+86) 151-4728-1130 ⋄ E-mail: tian.yu.feng@outlook.com
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: 3.88/4.0, Rank: 18/293 (Top 6%)

Beihang University (BUAA), Beijing, P.R.China 2018.9 - 2022.6
BEng in Computer Science GPA: 92.81/100, Rank: 4/195 (**Top 2%**)

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)

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

First Prize & Application Innovation Award, ASC 20-21, ASC Student Supercomputer Challenge 2021.5
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)