Yangshen Deng

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🎓 Education

Southern University of Science and Technology (SUSTech), China   Sept. 2022 – Jun. 2025
M.S in Computer Science (CS), GPA 3.76/4.0, Rank 4 | Advised by Prof. Bo Tang in Database Group

Beijing University of Posts and Telecommunications (BUPT), China   Sept. 2018 – Jun. 2022
B.E in Computer Science (CS), GPA 89.21/100

✏ Publications

AlayaDB: The Data Foundation for Efficient and Effective Long-context LLM Inference
Yangshen Deng, Zhengxin You, Long Xiang, Qilong Li, Peiqi Yuan, et al. *SIGMOD 2025*

Accelerating Merkle Patricia Trie with GPU
Yangshen Deng, Muxi Yan and Bo Tang. *PVLDB 2024*
[paper] [code] [slides]

How Does Software Prefetching Work on GPU Query Processing?
Yangshen Deng, Shiwen Chen, Zhaoyang Hong and Bo Tang. *DaMoN@SIGMOD 2024*
[paper] [code] [slides]

GHive: Accelerating Analytical Query Processing in Apache Hive via CPU-GPU Heterogeneous Computing
Haotian Liu, Bo Tang, Jiashu Zhang, Yangshen Deng, et al. *SoCC 2022*
[paper] [code]

GHive: A Demonstration of GPU-Accelerated Query Processing in Apache Hive
Haotian Liu, Bo Tang, Jiashu Zhang, Yangshen Deng, et al. *SIGMOD 2022* demo track
[paper]

⚙ Internships

TU Darmstadt: Systems Group   Jan. 2025 – March. 2025
Research Intern | Working with Prof. Carsten Binnig

EPFL: Robust Scalable Systems Software Lab   Jun. 2024 – Dec. 2024
Research Intern | Working with Prof. Sanidhya Kashyap

Huawei: Gauss Database Group, 2012 Lab   Feb. 2022 – Jun. 2022
Database Develop Intern

Alibaba: Alipay, Ant Group   Jul. 2021 – Sept. 2021
Software Develop Intern

👥 Community Contributions

Contributor of vLLM and transformers	2024
VLDB 2024 Student Volunteer Program	2024
Reviewer of SIGMOD Availability and Reproducibility [report]	2023 – 2024

♡ Awards

China National Scholarship	2024
BYD Scholarship	2024
Academic Star of Southern University of Science and Technology	2024
Outstanding Graduate Student of Southern University of Science and Technology	2023 – 2024
Winning Prize of Oceanbase Developer Competition (Rank 9th out of 1180 teams)	2023
Outstanding Student Award of VLDB Summer School	2022
Outstanding Graduate of Beijing University of Posts and Telecommunications	2022
Scholarship of Beijing University of Post and Telecommunications	2019 – 2021