

# 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

VLDB 2026 Shadow PC    2025  
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