## YANGSHEN DENG

yangshen.deng@alayadb.ai · % dengyangshen.netlify.app · • tkoniy

### **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  Research Intern   Working with Prof. Carsten Binnig	Jan. 2025 – March. 2025
EPFL: Robust Scalable Systems Software Lab Research Intern   Working with Prof. Sanidhya Kashyap	Jun. 2024 – Dec. 2024
Huawei: Gauss Database Group, 2012 Lab Database Develop Intern	Feb. 2022 – Jun. 2022
Alibaba: Alipay, Ant Group Software Develop Intern	Jul. 2021 – Sept. 2021

### **COMMUNITY CONTRIBUTIONS**

Contributor of vLLM and transformers

VLDB 2026 Shadow Program Committee

VLDB 2024 Student Volunteer Program

SIGMOD 2023, 2024 Availability & Reproducibility Committee

#### 

2024
2024
2024
2023 - 2024
2023
2022
2022
2019 - 2021