Sitian Chen

steam009 sweetccst

RESEARCH INTERESTS

My research interests focus on system for Machine Learning, processing-in-memory, and high-performance computing. My work aims to improve the cost-efficiency of cutting-edge applications in machine learning systems, including retrieval-augmented generation (RAG), vector search, and recommender systems. By exploring new hardware solutions and optimizing system-level integration, my goal is to bridge the gap between rapidly evolving machine learning models and the underlying computational infrastructure. In the end, I aim to enable more efficient, accessible, and robust AI systems for real-world deployment.

EDUCATION

Ph.D student of Department of Computer science

Hong Kong Baptist University Advisors: Prof. Amelie Chi Zhou

Bachelor of Computer science and Technology

ShenZhen university

Average GPA: 4.05/4.50(top 5%)

September 2024 - 2028(expected)

HongKong, China

September 2019 - June 2023

Shenzhen, China

HONORS AND AWARDS

- Best Poster Award, HKBU-BNBU Joint Postgraduate Research Symposium, 2025
- Outstanding Graduates, 2023(Top 5%)
- Second prize of Learning Star(three times in 2020, 2021, 2022)(Top 4%)
- PAC Winner of the national preliminary competition, 2021(Top 16 teams)

WORK EXPERIENCE

Hong Kong Baptist University

September 2023 - September 2024

Research Assistant

Shenzhen Zhuiyi Technology Co.,Ltd.

April 2023 - July 2023

Go Development Intern.

PUBLICATIONS

- [1] Sitian Chen, Amelie Chi Zhou, et al. UpANNS: Enhancing Billion-Scale ANNS Efficiency with Practical PIM Hardware. In SC'25
- [2] Sitian Chen, Tan H, Amelie Chi Zhou, et al. UpDLRM: Accelerating Personalized Recommendation using Real-World PIM Architecture. In Design Automation Conference(DAC), 2024.
- [3] Sitian Chen, Amelie Chi Zhou, et al. GPAQuant: Accelerating Personalized Recommendation with Group-Wise and PIM-Aware Quantization. (Under Review)
- [4] Xiao Y, *Sitian Chen*, Amelie Chi Zhou et al. Low-Latency Video Conferencing System for Geo-Distributed Data Centers. In IEEE International Symposium of Quality of Service (IWQoS), 2024.

TEACHING

Teaching Assistant

Operating System
TA Performance Award

Spring 2025