

+852 55146896
HongKong
csstchen@comp.hkbu.edu.hk

Sitian Chen

steam009
sweetcst

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

September 2024 - 2028(expected)

HongKong, China

Bachelor of Computer science and Technology

Shenzhen University
Average GPA: 4.05/4.50(top 5%)

September 2019 - June 2023

Shenzhen, China

HONORS AND AWARDS

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

WORK EXPERIENCE

Hong Kong Baptist University

Research Assistant

September 2023 - September 2024

PUBLICATIONS

[1] **Sitian Chen**, Amelie Chi Zhou, Yucheng Shi, Xin Yao. UpANNS: Enhancing Billion-Scale ANNS Efficiency with Practical PIM Hardware. **In SC' 2025**

[2] **Sitian Chen**, Haobin Tan, Amelie Chi Zhou, Yusen Li, Pavan Balaji (**Meta**). UpDLRM: Accelerating Personalized Recommendation using Real-World PIM Architecture. **In DAC' 2024**.

[3] Wenjun Yu, **Sitian Chen**, Amelie Chi Zhou, Cheng Chen (**Bytedance**). Near-Zero-Overhead Freshness for Recommendation Systems via Inference-Side Model Updates. **In HPCA' 2026**

[4] Xiao Y, **Sitian Chen**, Amelie Chi Zhou, Shuhao Zhang, Yi Wang, Rui Mao, Xuan Yang. Low-Latency Video Conferencing System for Geo-Distributed Data Centers. **In IWQoS' 2024**.

TEACHING

Teaching Assistant

Operating System

TA Performance Award

Research Methodology

Spring 2025

Fall 2025