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# Sitian Chen

steam009  
sweetccst

## RESEARCH INTERESTS

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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

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**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

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- Best Poster Award, HKBU-BNU 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

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**Hong Kong Baptist University**  
*Research Assistant*

**September 2023 - September 2024**

## PUBLICATIONS

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[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

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**Teaching Assistant**  
Operating System  
*TA Performance Award*  
Research Methodology

Spring 2025  
Fall 2025