ZHANG, Yongkang

Department of Computer Science and Engineering Hong Kong University of Science and Technology Clear Water Bay, Hong Kong S.A.R., China (Last updated on: June 14th, 2025)

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RESEARCH AREAS

Areas: Cloud Computing; Containers; Resource Management; GPU Virtualization.

Focus: High-performance, resource-efficient GPU cloud platforms.

EDUCATION

Hong Kong University of Science and Technology

Hong Kong S.A.R., China Sep. 2021 - Present

Ph.D. in Computer Science and Engineering

GPA: 3.77 / 4.30; HKPFS Awardee

Thesis Supervisor: Prof. WANG, Shuai and Prof. CHU, Xiaowen

Wuhan University
B.Eng. in Computer Science and Technology

Wuhan, Hubei, China Sep. 2017 - Jun. 2021

GPA: 3.98 / 4.00; GPA Ranking: 2 / 334; Excellent Undergraduate Thesis

Thesis: Idle Memory Reclamation and Overcommitment on Cloud

Thesis Supervisor: Prof. ZHANG, Huyin

INDUSTRIAL EXPERIENCE

Alibaba Cloud Hangzhou, Zhejiang, China

Research Intern of Cluster Management Group, Cloud Native Division Oct. 2020 - Jul. 2021

Mentor: HE, Jian

Microsoft Research Asia

Beijing, China

Research Intern of Networking Research Group

Jul. 2020 - Oct. 2020

Mentors: Dr. CHENG, Wenxue and Dr. CHENG, Peng

PUBLICATIONS

Conferences

Yongkang Zhang, Haoxuan Yu, Chenxia Han, Cheng Wang, Baotong Lu, Yunzhe Li, Zhifeng Jiang, Yang Li, Xiaowen Chu, and Huaicheng Li, "SGDRC: Software-Defined Dynamic Resource Control for Concurrent DNN Inference on NVIDIA GPUs," in *ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming* (*ACM PPoPP* '25), Las Vegas, NV, March 2025. (Acceptance Rate: 20.1% = 38/189)

Yongkang Zhang, Yinghao Yu, Wei Wang, Qiukai Chen, Jie Wu, Zuowei Zhang, Jiang Zhong, Tianchen Ding, Qizhen Weng, Lingyun Yang, Cheng Wang, Jian He, Guodong Yang, and Liping Zhang, "Workload Consolidation in Alibaba Clusters: The Good, the Bad, and the Ugly," in *the Proceedings of ACM Symposium on Cloud Computing (ACM SoCC '22*), San Francisco, CA, November 2022. (Acceptance Rate: 24.5% = 38/155)

PATENTS

Method, Apparatus, Device, and Storage Medium for Allocating GPU VRAM Channels. *China Patent (Under substantive examination). Application No.: CN119938331A.*

ACADEMIC SERVICES

Reviewer: IEEE Transactions on Cloud Computing, IEEE Internet of Things Journal, ACM ChinaSys (2024)

Artifact Evaluation Committee: IEEE HPCA (2024), ACM CCS (2025), ACM KDD (2025), USENIX FAST (2026 Spring)

TEACHING

Teaching Assistant: Cloud Computing and Big Data Systems (HKUST, 2022 & 2023), Computer Organization (HKUST, 2025)

SKILLS

Language: Chinese - Mandarin (Mother tongue); English (TOEFL: 113 / 120; CET-6: 683 / 710). **Programming:** C++ / C, Go, Rust, Python, Java, Verilog HDL, Tensorflow, PyTorch

AWARDS

| 2025 |
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