LINCHANG XIAO

EDUCATION

Sun Yat-sen University (SYSU), Guangzhou, China

2022 – Present

- 3rd-year Master student, expected June 2025. Majar: Computer Science and Technology
- Advisor: Prof. Di Wu
- Research Interests: High Performance Computing, Scheduling and Resource Allocation

Sun Yat-sen University (SYSU), Guangzhou, China

2018 - 2022

- B.S. in software engineering. Majar: Software Engineering
- Courses: Operating system, Computer network, Parallel and distributed computing

WORKING EXPERIENCE

Alibaba Hangzhou, China

2024/06 - Present

R&D in Kubernetes-based AI Infrastructure

- Optimize data storage and I/O in model training.
- Participate in the development of fault tolerance for distributed model training.

ByteDance Shenzhen, China

2021/05 - 2021/10

R&D in Ulike Camera, CapCut and Xingtu Pichype

• Develop and optimize media storage SDK in Ulike Camera.

PROJECT EXPERIENCE

Kubernetes-based privacy-preserving AI platform

2021/11 - 2022/08

- Develop a platform that provides a environment for users to **write**, **debug**, **train and deploy** their AI models online.
- Develop features for proactive acquisition of private training dataset based on the value of the training model and the privacy budget of private training data. Research Paper in TSC(CCF'A)
- Develop features that enables Cost-aware Scheduling, Cluster Autoscaling and GPU-sharing. Research Paper in TMC(CCF'A)
- Some features can be experienced in EasyHPC.

♠ RESEARCH EXPERIENCE

CRS: A Cost-Aware Resource Scheduling Framework for Deep Learning Task Orchestration in Mobile Clouds 2021/11 – 2022/08

- Propose a cost-aware resource scheduling framework orchestrating DL task execution in cloud.
- Devise an approximation algorithm with a guaranteed upper bound performance ratio.
- Accepted in IEEE Transactions on Mobile Computing (TMC, CCF-A).

History-Aware Privacy Budget Allocation for Model Training on Evolving Data-Sharing Platforms 2022/09 – 2023/08

- Propose a novel History-aware Privacy Budget Allocation algorithm for *Differential Privacy*-based datasharing platforms
- Provide the detailed competitive analysis to proof the performance of HPBA is theoretically guaranteed
- Accepted in IEEE Transactions on Services Computing (TSC, CCF-A).

🗱 SKILLS

• Programming Languages: Go, C++, Python, Swift, Objective-C

• Tools: Kubernetes, Ray, PyTorch, MPI, IATEX

• English: CET-4 and CET-6

• Blog: https://xlcbingo1999.github.io/