Minchen Yu

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Hong Kong University of Science of Technology Web: https://mincyu.github.io

EDUCATION Hong Kong University of Science and Technology, Hong Kong SAR, China

Department of Computer Science and Engineering

♦ **Ph.D.**, Computer Science and Engineering September 2018 – Present

♦ Supervisor: Prof. Wei Wang

Nanjing University, Nanjing, Jiangsu, China

Software Institute

♦ **B.Eng.**, Software Engineering September 2014 – July 2018

♦ NJU Outstanding Graduate Award

Honors and Awards ♦ Best Paper Runner-Up Award, IEEE ICDCS

2021

♦ SENG Academic Award for Continuing PhD Students, HKUST 2020

♦ Huawei PhD Fellowship, HKUST 2018 - 2021

♦ University Outstanding Graduate, Nanjing University 2018

♦ National Scholarship (**top 2**%)

2016

♦ People's Scholarship for Academic Excellence, Nanjing University 2015, 2017

♦ Excellent Student Awards, Nanjing University 2015

Professional Experience Hong Kong University of Science and Technology, Hong Kong SAR, China

Research/Teaching Assistant

January 2018 – Present

Alibaba Cloud, Hangzhou, China

Research Intern December 2021 – Present

Huawei Hong Kong Research Center, Hong Kong SAR, China

Research Intern October 2020 – March 2021

Morgan Stanley IT Department, Shanghai, China

Software Development Engineer (intern)

July – September 2017

Publications Conference Papers (in reverse chronological order)

[C6] **Minchen Yu**, Tingjia Cao, Wei Wang, Ruichuan Chen, "Following the Data, Not the Function: Rethinking Function Orchestration in Serverless Computing," accepted to appear in the *Proceedings of the 20th USENIX Symposium on Networked Systems Design and Implementation (NSDI '23)*, Boston, MA, April 2023.

- [C5] **Minchen Yu**, Zhifeng Jiang, Hok Chun Ng, Wei Wang, Ruichuan Chen, Bo Li, "Gillis: Serving Large Neural Networks in Serverless Functions with Automatic Model Partitioning," in the *Proceedings of the 41st IEEE International Conference on Distributed Computing Systems (ICDCS'21)*, Virtual Conference, July 2021. (**Best Paper Runner Up**)
- [C4] Huangshi Tian, **Minchen Yu**, Wei Wang, "CrystalPerf: Resource-Centric Performance Characterization for Dataflow Computation," in the *proceedings of USENIX Annual Technical Conference (ATC'21)*, Virtual Conference, July 2021.
- [C₃] **Minchen Yu**, Yinghao Yu, Yunchuan Zheng, Baichen Yang, Wei Wang, "RepBun: Load-Balanced, Shuffle-Free Cluster Caching for Structured Data," in the *proceedings of IEEE IN-FOCOM*'20, Virtual Conference, July 2020.
- [C2] Chengliang Zhang, **Minchen Yu**, Wei Wang, Feng Yan, "MArk: Exploiting Cloud Services for Cost-Effective, SLO-Aware Machine Learning Inference Serving," in the *proceedings* of USENIX Annual Technical Conference (ATC'19), Renton, WA, July 2019.
- [C1] Huangshi Tian, **Minchen Yu**, Wei Wang, "Continuum: A Platform for Cost-Aware, Low-Latency Continual Learning," in the *proceedings of ACM Symposium on Cloud Computing (SoCC'18)*, Carlsbad, CA, October 2018.

Journal Article

[J1] Chengliang Zhang, **Minchen Yu**, Wei Wang, Feng Yan, "Enabling Cost-Effective, SLO-Aware Machine Learning Inference Serving on Public Cloud," in *IEEE Transactions on Cloud Computing (TCC)*, June 2020.

Preprint

[P1] **Minchen Yu**, Tingjia Cao, Wei Wang, Ruichuan Chen, "Restructuring Serverless Computing with Data-Centric Function Orchestration," in *arXiv*:2109.13492, 2021.

TEACHING Experience

Hong Kong University of Science and Technology (Teaching Assistant)

- ♦ COMP4651: *Cloud Computing and Big Data Systems*
- Spring 2021, Spring 2022

♦ COMP3511: Operating System

Spring 2019

SKILLS

- ♦ Programming languages: C/C++, Python, Java
- ♦ ML frameworks: PyTorch, Tensorflow, MXNet
- ♦ Big data analytics: Spark, Hadoop, Alluxio
- ♦ GPU and CUDA programming