

# Minchen Yu

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PRESENT POSITION	Assistant Professor School of Data Science Chinese University of Hong Kong, Shenzhen	Office: Room 520 Email: <a href="mailto:yuminchen@cuhk.edu.cn">yuminchen@cuhk.edu.cn</a> Web: <a href="https://mincyu.github.io">https://mincyu.github.io</a>
RESEARCH INTERESTS	Cloud computing, distributed systems	
EDUCATION	<b>Hong Kong University of Science and Technology</b> , Hong Kong SAR, China <i>Department of Computer Science and Engineering</i> ◇ <b>Ph.D.</b> , Computer Science and Engineering, August 2023 ◇ <i>Dissertation</i> : “Towards Usable, Efficient Serverless Computing Systems” ◇ <i>Advisor</i> : Prof. Wei Wang  <b>Nanjing University</b> , Nanjing, Jiangsu, China <i>Software Institute</i> ◇ <b>B.Eng.</b> , Software Engineering, July 2018 ◇ NJU Outstanding Graduate Award	
HONORS AND AWARDS	◇ HKUST RedBird Academic Excellence Award, HKUST ◇ Best Paper Runner-Up Award, IEEE ICDCS ◇ SENG Academic Award for Continuing PhD Students, HKUST ◇ Huawei PhD Fellowship ◇ University Outstanding Graduate, Nanjing University ◇ National Scholarship ( <b>top 2%</b> ) ◇ Excellent Student Awards, Nanjing University	2023 2021 2020 2018 - 2021 2018 2016 2015
PROFESSIONAL EXPERIENCE	<b>Chinese University of Hong Kong, Shenzhen</b> , Shenzhen, China <i>Assistant Professor</i> December 2023 – Present  <b>Hong Kong University of Science and Technology</b> , Hong Kong SAR, China <i>Post-Doctoral Fellow</i> September – November 2023  <b>Hong Kong University of Science and Technology</b> , Hong Kong SAR, China <i>Research/Teaching Assistant</i> January 2018 – August 2023  <b>Alibaba Cloud</b> , Hangzhou, China <i>Research Intern</i> December 2021 – June 2023  <b>Huawei Hong Kong Research Center</b> , Hong Kong SAR, China <i>Research Intern</i> October 2020 – March 2021  <b>Morgan Stanley IT Department</b> , Shanghai, China	

## PUBLICATIONS

**Conference Papers** (in reverse chronological order)

[C7] **Minchen Yu**, Ao Wang, Dong Chen, Haoxuan Yu, Xiaonan Luo, Zhuohao Li, Wei Wang, Ruichuan Chen, Dapeng Nie, Haoran Yang, “FaaSv2: SLO-Aware, GPU-Efficient Serverless Inference via Model Swapping,” in *arXiv preprint arXiv:2306.03622*, June 2023. (under review)

[C6] **Minchen Yu**, Tingjia Cao, Wei Wang, Ruichuan Chen, “Following the Data, Not the Function: Rethinking Function Orchestration in Serverless Computing,” 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 INFOCOM’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.

**Workshop Paper**

[W1] **Minchen Yu**, Tingjia Cao, Wei Wang, Ruichuan Chen, “Following the Data, Not the Function: Rethinking Function Orchestration in Serverless Computing,” extended abstract in the *proceedings of the 3rd Workshop On Resource Disaggregation and Serverless Computing (WORDS’22)*, Nov, 2022.

**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.

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