Hailiang Zhao

+86-15172392385 | hliangzhao@zju.edu.cn | ZJU Homepage
ZJU 100 Young Professor | School of Software Technology | Zhejiang University
Ningbo 315100, China

Biography

Hailiang Zhao, Ph.D., IEEE & ACM Member (2025 – present), is a ZJU 100 Young Professor at the School of Software Technology, Zhejiang University, and an Outstanding Qizhen Young Scholar. He received his Ph.D. in Computer Science from Zhejiang University in 2024, with a visiting research appointment at Nanyang Technological University, Singapore (2022 – 2023). His research lies at the intersection of services computing and service system performance optimization, with a focus on developing intelligent, learning-augmented algorithms and systems. Notable contributions include PFSUM@NeurIPS '24 and Guard@NeurIPS '25, and novel techniques for learning-enhanced inference acceleration. He has authored or co-authored over 30 papers in leading journals and conferences, including Proceedings of the IEEE, IEEE TPDS, IEEE TMC, IEEE TSC, NeurIPS, CVPR, and ICWS, accumulating over 1,900 citations. He serves as a regular reviewer for prestigious venues such as IEEE TSC, TKDD, Chinese Journal of Computers, FGCS, NeurIPS, and CVPR. Dr. Zhao has received several honors, including the Incentive Program for Outstanding Ph.D. Dissertations by CCF-TCSC (2025), the Zhejiang University Outstanding Doctoral Dissertation Award (2024), and the Best Student Paper Award at IEEE ICWS 2019. He is currently the principal investigator of a task (sub-project) under China's National Key R&D Program (2024 – 2027), participates in a major project funded by the Zhejiang Provincial Natural Science Foundation (2025 – 2027), and leads or collaborates on multiple industry projects with Huawei, Kuaishou, ByteDance, and other technology enterprises.

Research Interests

Service Computing, Machine Learning System, AI, Distributed Computing

Education and Working Experience

- ZJU 100 Young Professor, Zhejiang University, Ningbo, China — *Aug 2024 - Now*
- Visiting Scholar, Nanyang Technological University, Singapore, Singapore — *Sep 2022 - Sep 2023*
- *Ph.D.*, Zhejiang University, Hangzhou, China — *Sep 2019 - Jun 2024*
- *B.Eng.*, Wuhan University of Technology, Wuhan, China — *Sep 2015 - Jun 2019*
- High School Student, High School Affiliated to Nanjing Normal University, Nanjing, China — *Sep 2012 - Jun 2015*

Honors and Awards

- Incentive Program for Outstanding Ph.D. Dissertations by CCF-TCSC — *2025*
- Qizhen Outstanding Young Scholar of Zhejiang University — *2024*
- Outstanding Ph.D. Dissertation Award of Zhejiang University — *2024*
- CSC Scholarship — *2022*
- Best Student Paper Award at the 2019 IEEE ICWS — *2019*
- Zhejiang University Doctoral Newcomer Scholarship — *2019*
- Outstanding Scholarship of Wuhan University of Technology — *2018*

Selected Publications

* denotes *corresponding author(s)*; † denotes *equal contribution*.

[1] Yinuo Deng†, **Hailiang Zhao**†*, Dongjing Wang, Peng Chen, Wenzhuo Qian, Jianwei Yin, Schahram Dustdar, and Shuiguang Deng*, *PeerSync: Accelerating Containerized Model Inference at the Network Edge*. In: *IEEE Transactions on Services Computing (TSC)*, early accesss, doi: 10.1109/TSC.2025.3648591.

[2] Peng Chen, **Hailiang Zhao***, Jiaji Zhang, Xueyan Tang, Yixuan Wang, and Shuiguang Deng*, *Robustifying Learning-Augmented Caching Efficiently without Compromising 1-Consistency*. In: *Proceedings of the 39th Conference on Neural Information Processing Systems (NeurIPS '25)*.

[3] **Hailiang Zhao**, Xueyan Tang*, Peng Chen, Jianwei Yin, and Shuiguang Deng, *Data-Locality-Aware Task Assignment and Scheduling for Distributed Job Executions.* In: *IEEE Transactions on Services Computing*, early access, doi: 10.1109/TSC.2025.3594158.

[4] **Hailiang Zhao**, Ziqi Wang, Guanjie Cheng*, Wenzhuo Qian, Peng Chen, Jianwei Yin, Schahram Dustdar, and Shuiguang Deng, *Online Workload Scheduling for Social Welfare Maximization in the Computing Continuum.* In: *IEEE Transactions on Services Computing*, early access, doi: 10.1109/TSC.2025.3570845.

[5] Fan'an Meng, Hongjun Dai*, Guoqing Cong, Bo Zhu, and **Hailiang Zhao**, *CATScaler: A Convolution-Augmented Transformer Scaling Framework for Cloud-Native Applications.* In: *IEEE Transactions on Services Computing*, early access, doi: 10.1109/TSC.2025.3592383.

[6] Cheng Zhang, Yinuo Deng, **Hailiang Zhao***, Tianlv Chen, and Shuiguang Deng*, *Tail-Learning: Adaptive Learning Method for Mitigating Tail Latency in Autonomous Edge Systems.* In: *ACM Transactions on Autonomous and Adaptive Systems*, early access, doi: https://doi.org/10.1145/3737289.

[7] Zhiwei Ling, Yachen Chang, **Hailiang Zhao***, Xinkui Zhao, Kingsum Chow*, and Shuiguang Deng, *CADRef: Robust Out-of-Distribution Detection via Class-Aware Decoupled Relative Feature Leveraging.* In: *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition 2025 (CVPR '25)*.

[8] **Hailiang Zhao**, Xueyan Tang, Peng Chen, and Shuiguang Deng, *Learning-Augmented Algorithms for the Bahncard Problem.* In: *Proceedings of the 38th Conference on Neural Information Processing Systems (NeurIPS '24)*.

[9] Shuiguang Deng*, **Hailiang Zhao***, Bingbing Huang, Cheng Zhang, Feiyi Chen, Yinuo Deng, Jianwei Yin, Schahram Dustdar, and Albert Y. Zomaya, *Cloud-Native Computing: A Survey from the Perspective of Services.* In: *Proceedings of the IEEE*, vol. 112, no. 1, pp. 12-46, Jan. 2024, doi: 10.1109/JPROC.2024.3353855.

[10] **Hailiang Zhao**, Shuiguang Deng*, Zhengzhe Xiang, Xueqiang Yan, Jianwei Yin, Schahram Dustdar, and Albert Y Zomaya, *Scheduling Multi-Server Jobs with Sublinear Regrets via Online Learning.* In: *IEEE Transactions on Services Computing*, vol. 17, no. 3, pp. 1168-1180, May-June 2024, doi: 10.1109/TSC.2023.3303344.

[11] **Hailiang Zhao**, Shuiguang Deng*, Feiyi Chen, Jianwei Yin, Schahram Dustdar, and Albert Y. Zomaya, *Learning to Schedule Multi-Server Jobs with Fluctuated Processing Speeds.* In: *IEEE Transactions on Parallel and Distributed Systems*, vol. 34, no. 1, pp. 234-245, 1 Jan. 2023, doi: 10.1109/TPDS.2022.3215947.

[12] Shuiguang Deng, **Hailiang Zhao**, Zhengzhe Xiang, Cheng Zhang, Rong Jiang, Ying Li*, Jianwei Yin, Schahram Dustdar, and Albert Y. Zomaya, *Dependent Function Embedding for Distributed Serverless Edge Computing.* In: *IEEE Transactions on Parallel and Distributed Systems*, vol. 17, no. 3, pp. 1168-1180, May-June 2024, doi: 10.1109/TPDS.2021.3137380.

[13] **Hailiang Zhao**, Shuiguang Deng*, Zijie Liu, Zhengzhe Xiang, Jianwei Yin, Schahram Dustdar, and Albert Y. Zomaya, *DPoS: Decentralized, Privacy-Preserving, and Low-Complexity Online Slicing for Multi-Tenant Networks.* In: *IEEE Transactions on Mobile Computing*, vol. 21, no. 12, pp. 4296-4309, 1 Dec. 2022, doi: 10.1109/TMC.2021.3074934.

[14] **Hailiang Zhao**, Shuiguang Deng*, Zijie Liu, Jianwei Yin, and Schahram Dustdar, *Distributed Redundant Placement for Microservice-based Applications at the Edge.* In: *IEEE Transactions on Services Computing*, vol. 15, no. 3, pp. 1732-1745, 1 May-June 2022, doi: 10.1109/TSC.2020.3013600. **(ESI Highly Cited Paper)**

[15] Shuiguang Deng, **Hailiang Zhao**, Weijia Fang*, Jianwei Yin, Schahram Dustdar, and Albert Y. Zomaya, *Edge Intelligence: The Confluence of Edge Computing and Artificial Intelligence.* In: *IEEE Internet of Things Journal*, vol. 7, no. 8, pp. 7457-7469, Aug. 2020, doi: 10.1109/JIOT.2020.2984887. **(ESI Hot Paper & ESI Highly Cited Paper)**

[16] **Hailiang Zhao**, Shuiguang Deng*, Cheng Zhang, Wei Du, Qiang He, and Jianwei Yin, *A Mobility-aware Cross-edge Computation Offloading Framework for Partitionable Applications.* In: *Proceedings of the 17th IEEE International Conference on Web Services (ICWS '19)*, Milan, Italy, 2019. **(Best Student Paper)**

[17] **Hailliang Zhao**, Wei Du*, Wei Liu, Tao Lei, and Qiwang Lei, *QoE Aware and Cell Capacity Enhanced Computation Offloading for Multi-Server Mobile Edge Computing Systems with Energy Harvesting Devices.* In: *Proceedings of the 15th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC '18)*, Guangzhou, China, 2018.