

ZHU Zhouruixing (朱周睿星)

Home Page : <https://zhuzrx.github.io/home-page> Email: zhouruixingzhu@link.cuhk.edu.cn

EDUCATION

-
- | | |
|--|---------------------------|
| The Chinese University of Hong Kong, Shenzhen (CUHKSZ) | Shenzhen, China |
| <i>Ph.D. – Computer Science; Supervisor: Prof. Pinjia He</i> | <i>Aug 2024-Present</i> |
| <ul style="list-style-type: none">• Research Interest: Software Reliability, LLM4SE, AIOps, Log Analysis, RCA. | |
| The Chinese University of Hong Kong, Shenzhen (CUHKSZ) | Shenzhen, China |
| <i>M.Phil. – Computer and Information Engineering; Supervisor: Prof. Pinjia He</i> | <i>Aug 2022-Jul 2024</i> |
| <ul style="list-style-type: none">• Highlighted Courses: Stochastic Process, Data Analytics, Image Processing and Computer, Selected Topics in Cloud Computing. | |
| Nanjing University of Aeronautics and Astronautics (NUAA) | Nanjing, China |
| <i>Bachelor - Computer Science and Technology</i> | <i>Aug 2016-June 2020</i> |
| <ul style="list-style-type: none">• Highlighted Courses: Digital Image Processing, Formal Language and Automata Theory, Operating System, Database principle, Principle and Application of Software Engineering, Computer Network, Assembly Language. | |

PUBLICATIONS

-
- [1] Y. Wang, **Z. Zhu**, Q. Fu, Y. Ma, P. He, “MRCA: Metric-level Root Cause Analysis for Microservices via Multi-Modal Data”, in the International Conference on Automated Software Engineering, 2024, *Just Accept*, [CCF-A].
 - [2] **Z. Zhu**, C. Lee, X. Tang, P. He, “HeMiRCA: Fine-Grained Root Cause Analysis for Microservices with Heterogeneous Data Sources,” in ACM Transactions on Software Engineering and Methodology, 2024, *Just Accept*, [CCF-A].
 - [3] J. Xu*, **Z. Zhu***, F. Yu, Y. Wu, B. Wang, P. He, “InsLog: An All-in-One Logging Approach with Instruction Fine-tuning,” in the International Conference on Software Engineering, 2025, *Under Review*, [CCF-A].
 - [4] C. Lee, **Z. Zhu**, T. Yang, Y. Su, P. He, and M. R. Lyu, “SPES: Towards Optimizing Performance-Resource Trade-Off for Serverless Functions,” in Proceedings of IEEE 40th International Conference on Data Engineering 2024, [CCF-A].
 - [5] J. Xu, Q. Fu, **Z. Zhu**, Y. Cheng, Z. Li, Y. Ma, P. He, “Hue: A User-Adaptive Parser for Hybrid Logs,” in Proceedings of the ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering, 2023: 413-424, [CCF-A].
- (* Equal contribution)

EXPERIENCE

-
- | | |
|--|-------------------------|
| The Chinese University of Hong Kong, Shenzhen (CUHKSZ) | Shenzhen, China |
| <i>Research Assistant</i> | <i>Aug 2022-Present</i> |
| <ul style="list-style-type: none">• Microservice Root Cause Analysis: Proposed a fine-grained root cause analysis framework for microservices, which leverages the potential relationship between service metrics and trace-based system anomaly degree to locate the root cause. Published a journal paper in TOSEM.• Hybrid Log Parser: Proposed a log parser, which natively supports hybrid log parsing and has a human feedback integration mechanism that largely reduces unnecessary queries. Published a conference paper in ESEC/FSE’2023.• Logging Statement Generation: Proposed an end-to end logging statements generation framework based on instruction tuning paradigm of large language models (LLMs).• FaaS Provision Scheduler: Proposed a differentiated method for runtime cold-start mitigation by optimizing serverless function provision. Published a conference paper in ICDE’2024. | |

Zhongxing Telecommunication Equipment Corporation (ZTE)

Nanjing, China

Software Testing Engineer & DevOps Engineer (Full-time)

Jul 2020-Jul 2022

- **Testing & Quality Assurance:** Led end-to-end testing activities, from requirements analysis to test case execution and defect tracking.
- **Infrastructure Management:** Established and maintained test environments and systems, ensuring seamless deployments.
- **Automation Expertise:** Designed and implemented an automated test framework, enhancing testing efficiency.
- **Continuous Integration:** Managed continuous integration processes to boost system reliability.

Huawei Technologies Co. Ltd.

Nanjing, China

Software Develop Engineer (Internship)

Jul 2019-Oct 2019

- **Embedded Systems Development:** Developed switch instructions using C language, contributing to the enhancement of system functionality.
- **Material Management Tool Creation:** Designed and implemented material management tools for efficient input of material information, real-time equipment utilization display, and proactive tracking of underutilized equipment.

HONORS AND AWARDS

Honors

Outstanding Student Scholarship, Nanjing University of Aeronautics and Astronautics 2019

Postgraduate Academic Scholarship, Nanjing University of Aeronautics and Astronautics 2017-2019

Competitions Awards

Network Security Competition (CTF) (Top 6/300), ZTE Corporation 2021

Top Ten Sports Star, Nanjing University of Aeronautics and Astronautics 2019

AI Practice Competition (Third-prize), School of Computer Science & Technology (NUAA) 2018

SKILLS

Languages: English, Mandarin

Coding: Python (proficient), C++, SQL

Modeling: Deep learning, Machine Learning

SERVICES

2025

External Reviewer – 47th International Conference on Software Engineering (ICSE 2025)

2024

Program Committee – 39th International Conference on Automated Software Engineering 2024 (ASE 2024, Industry Track)

External Reviewer – 39th International Conference on Automated Software Engineering 2024 (ASE 2024)

External Reviewer – 33rd International Symposium on Software Testing and Analysis (ISSTA 2024)

External Reviewer – 46th International Conference on Software Engineering (ICSE 2024)

External Reviewer – 33rd ACM International Conference on the Foundations of Software Engineering (FSE 2024)

2023

External Reviewer – 32nd ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2023)

External Reviewer – 34th IEEE International Symposium on Software Reliability Engineering (ISSRE 2023)