ZHU Zhouruixing (朱周睿星)

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EDUCATION

The Chinese University of Hong Kong, Shenzhen (CUHKSZ)   **Shenzhen, China**

M.Phil. – Computer and Information Engineering; Supervisor: Prof. Pinjia He   *Aug 2022-Present*

- **Research Interest**: Software Reliability, LLM4SE, AIOps, Log Analysis.
- **Highlighted Courses**: Stochastic Process, Data Analytics, Image Processing and Computer, Selected Topics in Cloud Computing.

Nanjing University of Aeronautics and Astronautics (NUAA)   **Nanjing, China**

Bachelor - Computer Science and Technology;   *Aug 2016-June 2020*

- **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] 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 IEEE/ACM International Conference on Software Engineering, 2025, *Under Review*, **[CCF-A]**.

[2] 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]**.

[3] **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, *Under Revision*, **[CCF-A]**.

[4] 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**

Research Assistant   *Aug 2022-Present*

- **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.
- **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.

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

- **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)