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ABOUT

I am an assistant researcher at the Software Institute, Nanjing University, China. My research interests focus on empirical software engineering, mining software repositories, and software quality assurance, particularly on software code review.

Since 2020, I have published 30+ peer-reviewed papers in high-quality international conferences (*e.g.*, ICSE, FSE, ASE) and journals (*e.g.*, TSE, TOSEM, EMSE) in the field of software engineering.

I have built long-term close collaborative relations with many world-leading software enterprises (*e.g.*, Huawei, Tencent), aiming at advancing scientific research meanwhile solving practical problems.

I obtained my Ph.D. under the supervision of Prof. Dr. He (Jason) Zhang, working in the DevOps+ research laboratory, at the Software Institute, Nanjing University. I was a visiting Ph.D student (2022 to 2023) at the Department of Informatics, University of Zurich, Switzerland, working with Prof. Dr. Alberto Bacchelli.

EDUCATION

- | | |
|---|------------------------------|
| • Nanjing University | Nanjing, China |
| • <i>Ph.D. in Software Engineering</i> | <i>Sep. 2019 - Dec. 2023</i> |
| • University of Zurich | Zurich, Switzerland |
| • <i>visiting Ph.D. in Software Engineering</i> | <i>Sep. 2022 - Aug. 2023</i> |
| • Northeast Forestry University | Harbin, China |
| • <i>M.Sc. in Software Engineering</i> | <i>Sep. 2016 - Jun. 2019</i> |
| • Southwest Minzu University | Chengdu, China |
| • <i>B.Sc. in Computer Science</i> | <i>Sep. 2012 - Jun. 2016</i> |

PROFESSIONAL APPOINTMENTS

- | | |
|-------------------------------|------------------------|
| • Nanjing University | Nanjing, China |
| • <i>Assistant Researcher</i> | <i>Apr. 2024 - now</i> |

HONORS AND AWARDS

- **Chinese Scholarship Council (CSC) Scholarship** (2022)
- **Mathematical Contest In Modeling (MCM) Outstanding Winner** (2026)

GRANTS AND FUNDING

- **Industry**
 - Tencent Infrastructure Rhino-Bird Focused Research Program** - LLMs for Automated Code Review
PI, 400K CNY, *Jul. 2025 - Jun. 2026*
 - CCF-Huawei Populus Grove Fund** - LLMs for Software Vulnerability Detection
PI, 300K CNY, *Jan. 2025 - Jul. 2025*

INVITED TALKS

NJSD 2025 - Intelligent Techniques for Code Review, Nanjing, China, *Oct. 2025*

NJSD 2024 - AI-Driven Code Review Paradigm Shift, Nanjing, China, *Oct. 2024*

PROFESSIONAL SERVICES

- **Conferences**

2027 FSE, AAAI, TechDebt

2026 SANER, TechDebt, AGENT, FSE Tool Demonstrations, Internetware Tool Demonstrations

2025 EASE, CHASE, RAIE, MSR, TechDebt

2024 RAIE

- **Journal referee**

TOSEM ACM Transactions on Software Engineering and Methodology

TSE IEEE Transactions on Software Engineering

EMSE Empirical Software Engineering

IST Information and Software Technology

SoSyM Software and Systems Modeling

JSEP Journal of Software: Evolution and Process

SQJ Software Quality Journal

TEACHING

- **Postgraduates & Undergraduates**

Empirical Software Engineering (since 2024, Spring)

Machine Learning (2025, Autumn)

- **Postgraduates**

Deep Learning (since 2026, Spring)

- **Undergraduates**

Introduction to Software Engineering (since 2024, Autumn)

AI for Software Engineering (since 2025, Spring)

PUBLICATIONS

- **Journal Articles** (* Corresponding author)

2026

[J15: TOSEM] Leveraging Self-Paced Learning for Software Vulnerability Detection

Zeru Cheng, Yanjing Yang, He Zhang, **Lanxin Yang***, Jinghao Hu, Jinwei Xu, Bohan Liu, Haifeng Shen
ACM Transactions on Software Engineering and Methodology (just accepted)

[J14: TSE] UNTCC: Untangling Composite Commit Using Structural and Semantic Information

Yuzhe Jin, **Lanxin Yang**, He Zhang, Gongyuan Li, Jun Lyu, Bohan Liu, Xin Zhou, Hongyu Kuang, Liming Dong

IEEE Transactions on Software Engineering, 2026, 52(8): -

[J13: IST] Enhancing Trustworthiness Evaluation of Large Language Models through Dataset Refinement

Jinwei Xu, Xin Zhou, Yanjing Yang, Tianhao Liu, Jinyu Xu, Chang Zhang, Lanxin Yang, Liming Dong
Information and Software Technology, 2026, 199: 108249:1-16

[J12: TSE] Automated Location of Vulnerable Libraries and Versions from Vulnerability Reports

Jinwei Xu, He Zhang, Xin Zhou, Yanjing Yang, Jinghao Hu, Xiaokang Li, Lanxin Yang, Bohan Liu
IEEE Transactions on Software Engineering, 2026, 52(7): 2127-2147

[J11: TOSEM] One Size Does Not Fit All: Investigating Efficacy of Perplexity in Detecting LLM-Generated Code

Jinwei Xu, He Zhang*, Yanjing Yang, Lanxin Yang*, Zeru Cheng, Jun Lyu, Bohan Liu, Xin Zhou, Alberto Bacchelli, Yin Kia Chiam, Thiam Kian Chiew
ACM Transactions on Software Engineering and Methodology, 2026, 35(5): 130:1-130:34

[J10: CJOC] An Approach for Identifying Affected Libraries from Multiple Sources Based on Large Language Models (in Chinese)

Jinwei Xu, Xin Zhou, Yanjing Yang, Xiaokang Li, Haofeng Yu, Lanxin Yang, He Zhang, Yonghang Wu
Chinese Journal of Computers, 2026, 49(2): 261-283

2025

[J9: AUSE] Automated Detection of Affected Libraries from Vulnerability Reports

Jinwei Xu, He Zhang, Xin Zhou, Yanjing Yang, Runfeng Mao, Xiaokang Li, Lanxin Yang, Haifeng Shen
Automated Software Engineering, 2025, 32(2): 73:1-73:38

[J8: AROC] Crowdsourcing Worker Selection Model for Software Crowdsourcing (in Chinese)

Junyu Jia, Lanxin Yang, Xiaodong Zhang, Jinwei Xu, Juzheng Zhang, He Zhang
Application Research of Computers, 2025, 42(6): 1822-1829

[J7: JSEP] Measuring Software Engineer's Contribution in Practice: An Industrial Experience Report

Yue Li, He Zhang, Lanxin Yang, Liming Dong, Juzheng Zhang, Bohan Liu
Journal of Software: Evolution and Process, 2025, 37(1): e2722:1-20

[J6: TSE] Refactoring Microservices to Microservices in Support of Evolutionary Design

Chenxing Zhong, Shanshan Li, He Zhang, Huang Huang, Lanxin Yang, Yuanfang Cai
IEEE Transactions on Software Engineering, 2025, 51(2): 484-502

[J5: JSS] DLAP: A Deep Learning Augmented Large Language Model Prompting Framework for Software Vulnerability Detection

Yanjing Yang, Xin Zhou, Runfeng Mao, Jinwei Xu, Lanxin Yang, Yu Zhang, Haifeng Shen, He Zhang
Journal of Systems and Software, 2025, 219: 112234:1-15

[J4: EMSE] Prioritizing Code Review Requests to Improve Review Efficiency: A Simulation Study

Lanxin Yang, Bohan Liu, Junyu Jia, Jinwei Xu, Junming Xue, He Zhang, Alberto Bacchelli
Empirical Software Engineering, 2025, 30(1): 24:1-24:50

2024

[J3: EMSE] A Preliminary Investigation on Using Multi-Task Learning to Predict Change Performance in Code Reviews

Lanxin Yang, He Zhang, Jinwei Xu, Jun Lyu, Xin Zhou, Dong Shao, Shan Gao, Alberto Bacchelli
Empirical Software Engineering, 2024, 29(6): 157:1-157:53

[J2: CJOS] Multi-Label Learning-based Approach for Evaluating the Quality of Code Review Comments (in Chinese)

Lanxin Yang, He Zhang, Jinwei Xu, Yifan Zhang, Zikuan Wang, Xin Zhou, Jingyue Li, Guoping Rong
Journal of Software, 2024, 35(6): 2775-2794

2021

[J1: IST] **Quality Assessment in Systematic Literature Reviews: A Software Engineering Perspective**

Lanxin Yang, He Zhang, Haifeng Shen, Xin Huang, Xin Zhou, Guoping Rong, Dong Shao
Information and Software Technology, 2021, 130: 106397:1-24

- **Conference Papers** (* Corresponding author)

2026

[C18: ISSRE '26] **Towards Effective Vulnerability Detection on OpenHarmony**

Runfeng Mao, He Zhang, Yanjing Yang, Junyu Jia, Lanxin Yang*, Xin Zhou*, Haifeng Shen
37th IEEE International Symposium on Software Reliability Engineering. IEEE, 2026: -

[C17: ICSME '26] **CoCoMoE: Towards Efficient Code Completion with Sparse Mixture-of-Experts Architectures**

He Zhang, Zhiqi Wang, Yue Li, Yuzhe Jin, Chenxing Zhong, Lanxin Yang
42nd IEEE International Conference on Software Maintenance and Evolution. IEEE, 2026: -

[C16: ICSE '26] **Automatic Dockerfile Generation with Large Language Models**

Jun Lyu, He Zhang, Yusong Yuan, Lanxin Yang, Yue Li, Manuel Rigger
48th IEEE/ACM International Conference on Software Engineering. ACM, 2026: -

2025

[C15: ASE '25] **Automatic Fixing of Missing Dependency Errors**

Jun Lyu, He Zhang, Lanxin Yang, Yue Li, Chenxing Zhong, Manuel Rigger
40th IEEE/ACM International Conference on Automated Software Engineering. IEEE, 2025: 597-609

[C14: ASE-Industry '25] **Securing Self-Managed Third-Party Libraries**

Xin Zhou, Jinwei Xu, He Zhang, Yanjing Yang, Lanxin Yang, Bohan Liu, Hongshan Tang
40th IEEE/ACM International Conference on Automated Software Engineering. IEEE, 2025: 3707-3718

[C13: FSE '25] **A Knowledge Enhanced Large Language Model for Bug Localization**

Yue Li, Bohan Liu, Ting Zhang, Zhiqi Wang, David Lo, Lanxin Yang*, Jun Lyu, He Zhang*
Proceedings of the ACM on Software Engineering. 2025, 2(FSE): 1914-1936

2024

[C12: ASE '24] **GPP: A Graph-Powered Prioritizer for Code Review Requests**

Lanxin Yang, Jinwei Xu, He Zhang, Fanghao Wu, Jun Lyu, Yue Li, Alberto Bacchelli
39th IEEE/ACM International Conference on Automated Software Engineering. ACM, 2024: 104-116

[C11: ASE '24] **An Explainable Automated Model for Measuring Software Engineer Contribution**

Yue Li, He Zhang, Yuzhe Jin, Zhong Ren, Liming Dong, Jun Lyu, Lanxin Yang*, David Lo, Dong Shao
39th IEEE/ACM International Conference on Automated Software Engineering. ACM, 2024: 783-794

[C10: ICSSP '24] **An Experience Report on Modeling Software Process in Industrial Context: Challenges and Solutions**

Yue Li, He Zhang, Liming Dong, Bohan Liu, Lanxin Yang
2024 International Conference on Software and Systems Processes. ACM, 2024: 12:1-12:12

[C9: FSE '24] **Towards Efficient Build Ordering for Incremental Builds with Multiple Configurations**

Jun Lyu, Shanshan Li, He Zhang, Lanxin Yang, Bohan Liu, Manuel Rigger
Proceedings of the ACM on Software Engineering, 2024, 1(FSE): 1494-1517

[C8: ICSE '24] **Fine-SE: Integrating Semantic Features and Expert Features for Software Effort Estimation**

Yue Li, Zhong Ren, Zhiqi Wang, **Lanxin Yang**, Liming Dong, Chenxing Zhong, He Zhang
46th IEEE/ACM International Conference on Software Engineering. ACM, 2024: 27:1-27:12

2023

[C7: ESEC/FSE '23] EvaCRC: Evaluating Code Review Comments

Lanxin Yang, Jinwei Xu, Yifan Zhang, He Zhang, Alberto Bacchelli

31st ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering. ACM, 2023: 275-287

[C6: ICSSP '23] An Experience Report on Assessing Software Engineer's Outputs in Practice

Juzheng Zhang, He Zhang, **Lanxin Yang**, Liming Dong, Yue Li

17th IEEE/ACM International Conference on Software and System Processes. IEEE, 2023: 13-24

[C5: SANER '23] Evaluating Learning-to-Rank Models for Prioritizing Code Review Requests using Process Simulation

Lanxin Yang, Bohan Liu, Junyu Jia, Junming Xue, Jinwei Xu, Alberto Bacchelli, He Zhang

30th IEEE International Conference on Software Analysis, Evolution and Reengineering. IEEE, 2023: 461-472

2022

[C4: ICSE-SEIP '22] An Industrial Experience Report on Retro-inspection

Lanxin Yang, He Zhang, Fuli Zhang, Xiaodong Zhang, Guoping Rong

44th IEEE/ACM International Conference on Software Engineering: Software in Practice. IEEE, 2022: 43-52

[C3: ICSE '22] Modeling Review History for Reviewer Recommendation: A Hypergraph Approach

Guoping Rong, Yifan Zhang, **Lanxin Yang**, Fuli Zhang, Hongyu Kuang, He Zhang

44th IEEE/ACM International Conference on Software Engineering. ACM, 2022: 1381-1392

2021

[C2: APSEC '21] Survey on Pains and Best Practices of Code Review

Liming Dong, He Zhang, **Lanxin Yang**, Zhiluo Weng, Xin Yang, Xin Zhou, Zifan Pan

28th Asia-Pacific Software Engineering Conference. IEEE, 2021: 482-491

2020

[C1: EASE '20] An Experimental Evaluation of Imbalanced Learning and Time-Series Validation in the Context of CI/CD Prediction

Bohan Liu, He Zhang, **Lanxin Yang**, Liming Dong, Haifeng Shen, Kaiwen Song

24th International Conference on Evaluation and Assessment in Software Engineering. ACM, 2020: 21-30

REFERENCES

- **Prof. Dr. He (Jason) Zhang** (PhD Supervisor, NJU)

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- **Prof. Dr. Alberto Bacchelli** (PhD Co-Supervisor, UZH)

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- **Prof. Jianmin Su** (Master Supervisor, NEFU)

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