# ZHOUYANG JIA

Assistant Professor College of Computer Science National University of Defense Technology +86 15973156535 jiazhouyang@nudt.edu.cn 109 Deya Road, Changsha, China, 410072

## **EDUCATION**

| Ph.D. in Software Engineering @ National University of Defense Technology | 2016.02 - 2020.12 |
|---|-------------------|
| Visiting Scholar @ University of Kentucky, USA                            | 2018.08-2020.08   |
| M.E. in Software Engineering @ National University of Defense Technology  | 2013.09 - 2015.12 |
| B.E. in Computer Science @ National University of Defense Technology      | 2009.09 - 2013.07 |

#### SELECTED AWARDS

| ACM SIGSOFT Distinguished Paper Award @ ICSE'23           | 2023 |
|---|------|
| IEEE TCSE Distinguished Paper Award @ SANER'23            | 2023 |
| CCF Excellent Doctoral Incentive Program Nomination Award | 2022 |
| Honorable Mention Award @ ICPC'21                         | 2021 |
| IEEE TCSE Distinguished Paper Award @ SANER'18            | 2018 |
| CCF Elite Collegiate Award                                | 2012 |

### SELECTED PUBLICATIONS

## 2023

Teng Wang\*, **Zhouyang Jia**\*, Shanshan Li, Si Zheng, Yue Yu, Erci Xu, Shaoliang Peng, and Xiangke Liao. Understanding and Detecting On-the-Fly Configuration Bugs [C]. In: Proceedings of the 45th International Conference on Software Engineering. **ICSE 2023**. To appear. (**Distinguished Paper Award**, \*Co-first Author).

Haochen He, Erci Xu, Shanshan Li, **Zhouyang Jia**, Si Zheng, Yue Yu, Jun Ma, and Xiangke Liao. When Database Meets New Storage Devices: Understanding and Exposing Performance Mismatches via Configurations [C]. In: Proceedings of the 49th International Conference on Very Large Data Bases. **VLDB 2023**. To appear.

Yingwei Ma, Yue Yu, Shanshan Li, **Zhouyang Jia**, Jun Ma, Rulin Xu, Wei Dong, and Xiangke Liao. MulCS: Towards a Unified Deep Representation for Multilingual Code Search [C]. In: Proceedings of the 30th International Conference on Software Analysis, Evolution and Reengineering. **SANER 2023**. To appear. (**Distinguished Paper Award**).

### 2022

Haochen He\*, **Zhouyang Jia**\*, Shanshan Li, Yue Yu, Chenglong Zhou, Qing Liao, Ji Wang, and Xiangke Liao. Multi-Intention-Aware Configuration Selection for Performance Tuning [C]. In: Proceedings of the 44th International Conference on Software Engineering. **ICSE 2022**. 1431-1442. (\*Co-first Author).

Deze Wang, **Zhouyang Jia**, Shanshan Li, Yue Yu, Yun Xiong, Wei Dong, and Xiangke Liao. Bridging Pre-trained Models and Downstream Tasks for Source Code Understanding [C]. In: Proceedings of the 44th International Conference on Software Engineering. **ICSE 2022**. 287-298.

## 2021

**Zhouyang Jia**, Shanshan Li, Tingting Yu, Chen Zeng, Erci Xu, Xiaodong Liu, Ji Wang, and Xiangke Liao. DepOwl: Detecting Dependency Bugs to Prevent Compatibility Failures [C]. In: Proceedings of the 43rd International Conference on Software Engineering. **ICSE 2021**. 86-98.

Wang Li\*, **Zhouyang Jia**\*, Shanshan Li, Yuanliang Zhang, Teng Wang, Erci Xu, Ji Wang, and Xiangke Liao. Challenges and opportunities: an in-depth empirical study on configuration error injection testing [C]. In: Proceedings of the 30th ACM SIGSOFT International Symposium on Software Testing and Analysis. **ISSTA 2021**. 478-490. (\*Co-first author).

Shulin Zhou, Xiaodong Liu, Shanshan Li, **Zhouyang Jia**, Yuanliang Zhang, Teng Wang, Wang Li, and Xiangke Liao. ConfInLog: Leveraging Software Logs to Infer Configuration Constraints [C]. In: Proceedings of the 29th IEEE/ACM International Conference on Program Comprehension. **ICPC 2021**. 94-105. (**Honorable Mention Award**)

## 2020

Haochen He\*, **Zhouyang Jia**\*, Shanshan Li, Erci Xu, Tingting Yu, Yue Yu, Ji Wang, and Xiangke Liao. CP-Detector: Using Configuration-related Performance Properties to Expose Performance Bugs [C]. In: Proceedings of the 35th IEEE/ACM International Conference on Automated Software Engineering. **ASE 2020**. 623-634. (\*Co-first Author).

Shanshan Li, Xu Niu, **Zhouyang Jia**, Xiangke Liao, Ji Wang, and Tao Li. Guiding log revisions by learning from software evolution history [J]. Empirical Software Engineering. **EMSE 2020**. 25: 2302–2340.

## 2019

**Zhouyang Jia**, Shanshan Li, Tingting Yu, Xiangke Liao, Ji Wang, Xiaodong Liu, and Yunhuai Liu. Detecting Error-Handling Bugs without Error Specification Input [C]. In: Proceedings of the 34th IEEE/ACM International Conference on Automated Software Engineering. **ASE 2019**. 213-225.

**Zhouyang Jia**, Shanshan Li, Tingting Yu, Xiangke Liao, and Ji Wang. Automatically detecting missing cleanup for ungraceful exits [C]. In: Proceedings of the 27th ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering. **ESEC/FSE 2019**. 751–762.

## 2018

Zhouyang Jia, Shanshan Li, Xiaodong Liu, Xiangke Liao, and Yunhuai Liu. SMARTLOG: Place error log statement by deep understanding of log intention [C]. In: Proceedings of the 25th International Conference on Software Analysis, Evolution and Reengineering. SANER 2018. 61-71. (Distinguished Paper Award).

Shanshan Li, Xu Niu, **Zhouyang Jia**, Ji Wang, Haochen He, and Teng Wang. Logtracker: learning log revision behaviors proactively from software evolution history [C]. In: Proceedings of the 26th Conference on Program Comprehension. **ICPC 2018**. 178–188.