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| | 研究方向: | 软件安全，程序分析，软件工程 |

【详细信息】

吴荣鑫，副教授，博导。2017 年于香港科技大学获得计算机科学与工程系哲学博士，2017 年 9 月至 2019 年 8 月于香港科技大学任博士后研究员，2019 年 9 月至今任厦门大学信息学院副教授。入选福建省第七批“百人计划”青年项目、厦门大学南强青年拔尖人才支持计划，主持国家自然科学基金青年基金等，参与江苏省重点研发计划等。在软件工程、程序分析和计算机安全的顶级会议和期刊上共发表 28 篇论文，其中 CCF-A 类期刊和会议论文 25 篇，曾两次荣获软件工程 CCF-A 类会议颁发的杰出论文奖（ISSTA 2014 和 ICSE 2019），谷歌学术引用次数 1536 次。其主要的研究方向是源代码静态漏洞扫描技术和软件错误自动化诊断技术。ACM 会员，IEEE 会员，计算机学会（CCF）会员。担任 ASE 2021、SANER 2021、ASE 2020 Tool Demo、ISSTA 2020 Tool Demo、SAC 2021、SAC 2020、SAC 2019 等国际学术会议程序委员会成员；长期担任 IEEE Transactions on Software Engineering、Journal of Empirical Software Engineering 等软件工程顶级期刊的审稿人。

【在研项目】

南强青年拔尖人才支持项目，2019 - 2024，150 万

国家自然科学基金青年基金项目，“软件崩溃自动化分析的关键技术研究”，25 万，2020 - 2022

江苏省前沿引领技术基础研究专项课题，2020-2025，80 万

厦门市青年创新基金，2020-2023，15 万

福建省第七批百人计划青年项目，2021-2023，50 万

【发表论文】

会议论文（*为通讯作者）：

- [1] "BEACON : Directed Grey-Box Fuzzing with Provable Path Pruning". Heqing Huang, Yiyuan Guo, Qingkai Shi, Peisen Yao, Rongxin Wu, and Charles Zhang. In Proceedings of the 43rd IEEE Symposium on Security and Privacy (S&P 2022). May 2022. (CCF-A)
- [2] "Skeletal Approximation Enumeration for SMT Solver Testing". Peisen Yao, Heqing Huang*, Wensheng Tang, Qingkai Shi, Rongxin Wu, and Charles Zhang. In Proceedings of the 29th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2021). Athens, Greece, Aug 2021. (CCF-A)
- [3] "Fuzzing SMT Solvers via Two-Dimensional Input Space Exploration". Peisen Yao, Heqing Huang, Wensheng Tang, Qingkai Shi, Rongxin Wu*, and Charles Zhang. In Proceedings of the 30th ACM

- SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2021). Aarhus, Denmark, July 2021. (CCF-A)
- [4] "Path-Sensitive Sparse Analysis without Path Conditions". Qingkai Shi, Peisen Yao*, Rongxin Wu* and Charles Zhang. In Proceedings of the 42nd ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI 2021). Virtual conference, June 2021. (CCF-A)
 - [5] "Escaping Dependency Hell: Finding Build Dependency Errors with the Unified Dependency Graph". Gang Fan, Chengpeng Wang, Rongxin Wu*, Qingkai Shi and Charles Zhang. In Proceedings of the 29th ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2020). Los Angeles, USA, July 2020. (CCF-A)
 - [6] "Pangolin: Incremental Hybrid Fuzzing with Polyhedral Path Abstraction". Heqing Huang, Peisen Yao, Rongxin Wu, Qingkai Shi and Charles Zhang. In Proceedings of the 41st IEEE Symposium on Security and Privacy (S&P 2020). Hyatt Regency, San Francisco, CA, USA, May 2020. (CCF-A)
 - [7] "Conquering the Extensional Scalability Problem for Value-Flow Analysis Frameworks". Qingkai Shi, Rongxin Wu*, Gang Fan and Charles Zhang. In Proceedings of the 42nd International Conference on Software Engineering (ICSE 2020). Seoul, South Korea, May 2020. (CCF-A)
 - [8] "Exploring and Exploiting the Correlations between Bug-Inducing and Bug-Fixing Commits". Ming Wen, Rongxin Wu*, Yepang Liu, Yongqiang Tian, Xuan Xie, Shing-Chi Cheung and Zhendong Su. In Proceedings of The ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering 2019 (ESEC/FSE 2019). Tallinn, Estonia, August 2019. (CCF-A)
 - [9] "SMOKE: Scalable Path-Sensitive Memory Leak Detection for Millions of Lines of Code". Gang Fan, Rongxin Wu*, Qingkai Shi, Xiao Xiao, Jinguo Zhou and Charles Zhang. In Proceedings of the 41st International Conference on Software Engineering (ICSE 2019). Montréal, QC, Canada. May 2019. (**ACM SIGSOFT Distinguished Paper Award Winner**). (CCF-A)
 - [10] "Could I Have a Stack Trace to Examine the Dependency Conflict Issue?". Ying Wang, Ming Wen, Rongxin Wu*, Zhenwei Liu, Shin Hwei Tan, Zhiliang Zhu, Hai Yu and Shing-Chi Cheung*. In Proceedings of the 41st International Conference on Software Engineering (ICSE 2019). Montréal, QC, Canada. May 2019. (CCF-A)
 - [11] "Exposing Library API Misuses via Mutation Analysis". Ming Wen, Yepang Liu, Rongxin Wu, Xuan Xie, Shing-Chi Cheung and Zhendong Su. In Proceedings of the 41st International Conference on Software Engineering (ICSE 2019). Montréal, QC, Canada. May 2019. (CCF-A)
 - [12] "Do the Dependency Conflicts in My Project Matter?". Ying Wang, Ming Wen, Zhenwei Liu, Rongxin Wu, Rui Wang, Bo Yang, Hai Yu, Zhiliang Zhu and Shing-Chi Cheung. In Proceedings of ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2018), Lake Buena Vista, Florida, United States. Nov 2018. (CCF-A)
 - [13] "Pinpoint: Fast and Precise Sparse Value Flow Analysis for Million Lines of Code". Qingkai Shi, Xiao Xiao, Rongxin Wu, Jinguo Zhou, Gang Fan, and Charles Zhang. In Proceedings of the 39th ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI 2018), Philadelphia, Pennsylvania, United States. June 2018. (CCF-A)
 - [14] "Context-Aware Patch Generation for Better Automated Program Repair". Ming Wen, Junjie Chen, Rongxin Wu, Dan Hao and Shing-Chi Cheung. In Proceedings of the 40th International Conference on Software Engineering (ICSE 2018), Gothenburg, Sweden, May, 2018. (CCF-A)
 - [15] "Locus: Locating Bugs from Software Changes". Ming Wen, Rongxin Wu and Shing-Chi Cheung. In Proceedings of the 31st IEEE/ACM International Conference on Automated Software Engineering (ASE 2016), Singapore, Sep, 2016. (CCF-A)

- [16] "Casper: An Efficient Approach to Call Trace Collection". Rongxin Wu, Xiao Xiao, Shing-Chi Cheung, Hongyu Zhang and Charles Zhang. In Proceedings of ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL 2016), St. Petersburg, Florida, Jan, 2016. (CCF-A)
- [17] "Diagnose crashing faults on production software". Rongxin Wu. In Proceedings of Doctoral Symposium for ACM SIGSOFT International Symposium on the Foundations of Software Engineering (FSE 2014), Hong Kong, China, Nov 2014. (CCF-A)
- [18] "CrashLocator: Locating Crashing Faults based on Crash Stacks". Rongxin Wu, Hongyu Zhang, Shing-Chi Cheung and Sunghun Kim. In Proceedings of International Symposium on Software Testing and Analysis (ISSTA 2014), San Jose, CA, July 21-25, 2014. (**ACM SIGSOFT Distinguished Paper Award Winner**) (CCF-A)
- [19] "ReBucket – A Method for Clustering Duplicate Crash Reports based on Call Stack Similarity". Yingnong Dang, Rongxin Wu, Hongyu Zhang, Dongmei Zhang and Peter Novel. In Proceedings of the 34th International Conference on Software Engineering (ICSE 2012), Zurich, Switzerland, June 2012. (CCF-A)
- [20] "ReLink: Recovering Links between Bugs and Changes". Rongxin Wu, Hongyu Zhang, Sunghun Kim and S.C.Cheung. In Proceedings of the joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2011), Szeged, Hungary, Sep 5-9 2011. (CCF-A)
- [21] "Dealing with Noise in Defect Prediction". Sunghun Kim, Hongyu Zhang, Rongxin Wu and Liang Gong. In Proceedings of the 33rd International Conference on Software Engineering (ICSE 2011), Waikiki, Honolulu, Hawaii, May 21-28, 2011. (CCF-A)
- [22] "Sampling program quality". Hongyu Zhang and Rongxin Wu. In Proceedings of the 26th IEEE International Conference on Software Maintenance (ICSM 2010), Timisoara, Romania, Sep 12-18, 2010. (CCF-B)

期刊论文（*为通讯作者）：

- [1] "Will Dependency Conflicts Affect My Program's Semantics?". Ying Wang, Rongxin Wu, Chao Wang, Ming Wen, Yepang Liu, Shing-Chi Cheung, Hai Yu*, Chang Xu and Zhiliang Zhu. In Transactions of Software Engineering, Online, 2021. (CCF-A)
- [2] "Historical Spectrum based Fault Localization". Ming Wen, Junjie Chen, Yongqiang Tian, Rongxin Wu*, Dan Hao, Shi Han and Shing-Chi Cheung. In Transactions of Software Engineering, Online, 2019. (CCF-A)
- [3] "Automatic Detection and Update Suggestion for Outdated API Names in Documentation". Seonah Lee, Rongxin Wu, Shing-Chi Cheung and Sungwon Kang*. In Transactions of Software Engineering, vol. 47, no. 4, pp. 653-675, April 2021. (CCF-A)
- [4] "How Well Do Change Sequences Predict Defects? Sequence Learning from Software Changes". Ming Wen, Rongxin Wu* and Shing-Chi Cheung. In Transactions of Software Engineering, vol. 46, no. 11, pp. 1155-1175, Nov 2020. (CCF-A)
- [5] "ChangeLocator: Locate Crash-Inducing Changes based on Crash Reports". Rongxin Wu*, Ming Wen, Shing-Chi Cheung and Hongyu Zhang. In Journal of Empirical Software Engineering, vol. 23, no. 5, 2866–2900, Oct 2018. (CCF-A)
- [6] "Sample-based Software Defect Prediction with Active and Semi-supervised Learning". Ming Li, Hongyu Zhang*, Rongxin Wu and Zhi-Hua Zhou. In Journal of Automated Software Engineering, pp.1-30, Jan 2012. (CCF-A)