

# Publications of Zhoulai Fu

## Peer-reviewed (9)

1. Daming Zou, Muhan Zeng, Yingfei Xiong, **Zhoulai Fu**, Lu Zhang, and Zhendong Su, “Detecting Floating-Point Errors via Atomic Conditions.” In 47th ACM SIGPLAN Symposium on Principles of Programming Languages (POPL) 2020.
2. Anders Fischer-Nielsen, **Zhoulai Fu**, Ting Su, and Andrzej Wasowski, “The forgotten case of the dependency bugs: on the example of the robot operating system,” in 42<sup>nd</sup> international conference on software engineering: software engineering in practice (ICSE-SEIP), 2020.
3. **Zhoulai Fu** and Zhendong Su, “Effective Floating-Point Analysis via Weak-Distance Minimization.” In 40th ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI), 2019.
4. **Zhoulai Fu** and Zhendong Su, “Achieving High Coverage for Floating-Point Code via Unconstrained Programming.” In 38th ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI), 2017.
5. **Zhoulai Fu** and Zhendong Su, “XSat: A Fast Floating-Point Satisfiability Solver.” In 28th International Conference on Computer Aided Verification (CAV), 2016.
6. **Zhoulai Fu**, Zhaojun Bai, and Zhendong Su. “Automated Backward Error Analysis for Numerical Code.” In Proceedings of the 2015 ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA), 2015.
7. Ting Su, **Zhoulai Fu**, Geguang Pu, Jifeng He, and Zhendong Su. “Combining Symbolic Execution and Model Checking for Data Flow Testing.” In 37th International Conference on Software Engineering (ICSE), 2015.
8. **Zhoulai Fu**, “Targeted Update – Aggressive Memory Abstraction Beyond Common Sense and its Application on Static Numeric Analysis.” In 23rd European Symposium on Programming (ESOP), 2014.
9. **Zhoulai Fu**, “Modularly Combining Numeric Abstract Domains with Points-to Analysis, and a Scalable Static Numeric Analyzer for Java.” In 15th International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI), 2014.

## Not peer-reviewed (1)

1. **Zhoulai Fu**, “A Novel Methodology for Automated Software Testing.” U.S. Provisional Patent Application No. 2881381 filed in Aug, 2019, patent pending