

Wei You

Associate Professor

Renmin University of China

📅 March 3, 1988

☎ +86 15901004530

✉ youwei@ruc.edu.cn

📍 <http://www.youwei.site>



EDUCATION

2010.09 – 2016.06



◆ Renmin University of China, Ph.D. in Computer Application Technology

2006.09 – 2010.06

◆ Renmin University of China, B.E. in Management Information System

WORK EXPERIENCE



2019.09 – Present

◆ Associate Professor, School of Information, Renmin University of China

2017.08 – 2019.07

◆ Post-Doctoral Research Associate, Department of Computer Science, Purdue University

2016.08 – 2017.07

◆ Post-Doctoral Research Associate, School of Informatics and Computing, Indiana University

RESEARCH INTERESTS



◆ Software Engineering: Semantics-based Fuzz Testing, Data-Driven Code Analysis

◆ Software Quality Assurance: Vulnerability Detection, Malware Detection

AWARDS



2021

◆ CCF Award for Innovation on Computer Science and Engineering (Nature Science Award)

2019

◆ ACM SIGPLAN Distinguished Paper Award

PUBLICATIONS



S&P 2025

◆ Dongchen Xie, Dongnan He, **Wei You***, Jianjun Huang, Bin Liang, Shuitao Gan, Wenchang Shi. BridgeRouter: Automated Capability Upgrading of Out-of-bounds Write Vulnerabilities to Arbitrary Memory Write Primitives in the Linux Kernel. In *Proceedings of the 46th IEEE Symposium on Security and Privacy*. (S&P 2025)

S&P 2025

◆ Jianan Feng, Jiachun Li, Changqing Miao, Jianjun Huang, **Wei You**, Wenchang Shi, Bin Liang. Fight Fire with Fire: Combating Adversarial Patch Attacks using Pattern-randomized Defensive Patches. In *Proceedings of the 46th IEEE Symposium on Security and Privacy*. (S&P 2025)

ISSTA 2024

◆ Dongnan He, Dongchen Xie, Yujie Wang, **Wei You***, Bin Liang, Jianjun Huang, Wenchang Shi, Zhuo Zhang, Xiangyu Zhang. Define-use Guided Path Exploration for Better Forced Execution. In *Proceedings of the 33rd ACM SIGSOFT International Symposium on Software Testing and Analysis*. (ISSTA 2024)

ICSE 2024

◆ Xuwei Liu, **Wei You**, Yapeng Ye, Zhuo Zhang, Jianjun Huang, Xiangyu Zhang. FuzzInMem: Fuzzing Programs via In-memory Structures. In *Proceedings of the 46th ACM/IEEE International Conference on Software Engineering*. (ICSE 2024)

ICSE 2023

◆ Suyue Guo, Xinyu Wang, **Wei You***, Bin Liang, Wenchang Shi, Yiwei Zhang, Jianjun Huang, Jian Zhang. Operand-variation-oriented Differential Analysis for Fuzzing Binding Calls in PDF Readers. In *Proceedings of the 45th ACM/IEEE International Conference on Software Engineering*. (ICSE 2023)

SECURITY 2023

◆ Ji Shi, Zhun Wang, Zhiyao Feng, Yang Lan, Shisong Qin, **Wei You**, Wei Zou, Mathias Payer, Chao Zhang. AIFORE: Smart Fuzzing Based on Automatic Input Format Reverse Engineering. In *Proceedings of the 32nd USENIX Security Symposium*. (SECURITY 2023)

- ISSTA 2022 ◆ Xuwei Liu, **Wei You***, Zhuo Zhang, Xiangyu Zhang. TensileFuzz: Facilitating Seed Input Generation in Fuzzing via String Constraint Solving. In *Proceedings of the 31st ACM SIGSOFT International Symposium on Software Testing and Analysis*. (ISSTA 2022)
- SECURITY 2021 ◆ Yousra Aafer, **Wei You***, Yi Sun, Yu Shi, Xiangyu Zhang, Heng Yin. Android SmartTVs Vulnerability Discovery via Log-guided Fuzzing. In *Proceedings of the 30th Usenix Security Symposium*. (SECURITY 2021)
- S&P 2021 ◆ Zhuo Zhang, **Wei You***, Guanhong Tao, Yousra Aafer, Xuwei Liu, Xiangyu Zhang. StochFuzz: Sound and Cost-effective Fuzzing of Stripped Binaries by Incremental and Stochastic Rewriting. In *Proceedings of the 42nd IEEE Symposiums on Security and Privacy*. (S&P 2021)
- S&P 2021 ◆ Zhuo Zhang, Yapeng Ye, **Wei You***, Guanhong Tao, Wen-chuan Lee, Yonghwi Kwon, Yousra Aafer, Xiangyu Zhang. OSPREY: Recovery of Variable and Data Structure via Probabilistic Analysis for Stripped Binary. In *Proceedings of the 42nd IEEE Symposiums on Security and Privacy*. (S&P 2021)
- S&P 2020 ◆ **Wei You**, Zhuo Zhang, Yonghwi Kwon, Yousra Aafer, Fei Peng, Yu Shi, Carson Harmon, Xiangyu Zhang. PMP: Cost-effective Forced Execution with Probabilistic Memory Pre-planning. In *Proceedings of the 41st IEEE Symposiums on Security and Privacy*. (S&P 2020)
- OOPSLA 2019 ◆ Zhuo Zhang, **Wei You***, Guanhong Tao, Guannan Wei, Yonghwi Kwon, Xiangyu Zhang. BDA: Practical Dependence Analysis for Binary Executables by Unbiased Whole-program Path Sampling and Per-path Abstract Interpretation. In *Proceedings of the 34th ACM Conference on Object-Oriented Programming Systems, Languages and Applications*. (OOPSLA 2019)
- ICSE 2019 ◆ **Wei You**, Xuwei Liu, Shiqing Ma, David Perry, Xiangyu Zhang, Bin Liang. SLF: Fuzzing without Valid Seed Inputs. In *Proceedings of the 41st International Conference on Software Engineering*. (ICSE 2019)
- S&P 2019 ◆ **Wei You**, Xueqiang Wang, Shiqing Ma, Jianjun Huang, Xiangyu Zhang, XiaoFeng Wang, Bin Liang. ProFuzzer: On-the-fly Input Type Probing for Better Zero-day Vulnerability Detection. In *Proceedings of the 40th IEEE Symposium on Security and Privacy*. (S&P 2019)
- CCS 2017 ◆ **Wei You**, Peiyuan Zong, Kai Chen, XiaoFeng Wang, Xiaojing Liao, Pan Bian, Bin Liang. SemFuzz: Semantics-based Automatic Generation of Proof-of-concept Exploits. In *Proceedings of the 24th Conference on Computer and Communications Security*. (CCS 2017)
- CCS 2017 ◆ Yi Chen, **Wei You**, Yeonjoon Lee, Kai Chen, XiaoFeng Wang, Wei Zou. Mass Discovery of Android Traffic Imprints through Instantiated Partial Execution. In *Proceedings of the 24th ACM Conference on Computer and Communications Security*. (CCS 2017)
- TDSC 2017 ◆ **Wei You**, Bin Liang, Wenchang Shi, Peng Wang, Xiangyu Zhang. TaintMan: An ART-compatible Dynamic Taint Analysis Framework on Unmodified and Non-rooted Android Devices. In *IEEE Transactions on Dependable and Secure Computing*. (TDSC 2017)
- ICSE 2016 ◆ **Wei You**, Bin Liang, Wenchang Shi, Shuyang Zhu, Peng Wang, Sikefu Xie, Xiangyu Zhang. Reference Hijacking: Patching, Protecting and Analyzing on Unmodified and Non-rooted Android Devices. In *Proceedings of the 38th International Conference on Software Engineering*. (ICSE 2016)
- ICSE 2016 ◆ Bin Liang, Pan Bian, Yan Zhang, Wenchang Shi, **Wei You**, Yan Cai. AntMiner: Mining More Bugs by Reducing Noise Interference. In *Proceedings of the 38th International Conference on Software Engineering*. (ICSE 2016)
- WWW 2016 ◆ Bin Liang, Miaoqiang Su, **Wei You**, Wenchang Shi, Gang Yang. Cracking Classifiers for Evasion: A Case Study on the Google's Phishing Pages Filter. In *Proceedings of the 25th International World Wide Web Conference*. (WWW 2016)