Yizhuo Zhai

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Computer Science and Engineering University of California, Riverside

Google Scholar DBLP

Email: yizhuo dot zhai at email dot ucr dot edu Website: https://yizhuozhai.github.io

RESEARCH OBJECTIVE

System Security • Linux Kernel Security

Program Analysis • Static Analysis, Symbolic Execution

EDUCATION

09/2016 - present Ph.D. in Computer Science, University of California, Riverside, USA

Advisor: Zhiyun Qian & Srikanth V. Krishnamurthy

09/2015 - 06/2016 Study Abroad in Software Engineering, University of Limerick, Ireland

09/2012 - 06/2016 Bachelor in Software Engineering, Xidian University, China

GPA: 3.82/4.0, 91/100 (ranked 1st)

09/2009 – 06/2012 The Affiliated High School Of Shanxi University, Shanxi Province, China

ACADEMIC EXPERIENCE

09/2016 – present Graduate Student Researcher

Center for Research and Education in Cyber Security and Privacy (CRESP)

University of California, Riverside, USA

06/2021 - 09/2021 Research Intern

Samsung Research America, USA

06/2020 - 09/2020 Research Intern

Baidu X-Lab, USA

PUBLICATIONS

CONFERENCE

[C3] Progressive Scrutiny: Incremental Detection of UBI bugs in the Linux Kernel

NDSS 22 Yizhuo Zhai, Yu Hao, Zheng Zhang, Weiteng Chen, Guoren Li, Zhiyun Qian, Chengyu Song, Manu Sridharan,

Srikanth V. Krishnamurthy, Trent Jaeger, Paul Yu

Network and Distributed System Security Symposium, NDSS 2022. 🔁 🜎 Tool 🕨 Recording

Linux Kernel Security, Static Analysis, Symbolic Execution

Selected Patches for Linux kernel: [Patch1] [Patch2] [Patch3]

[C2] Statically Discovering High-Order Taint Style Vulnerabilities in OS Kernels

CCS 21 Hang Zhang, Weiteng Chen, Yu Hao, Guoren Li, Yizhuo Zhai, Xiaochen Zou, Zhiyun Qian

ACM SIGSAC Conference on Computer and Communications Security, CCS 2021. 🔁 🜎 Tool

Linux Kernel Security, Static Analysis

[C1] UBITect: A Precise and Scalable Method to Detect Use-before-Initialization Bugs in Linux Kernel

ESEC/FSE 20Yizhuo Zhai, Yu Hao, Hang Zhang, Daimeng Wang, Chengyu Song, Zhiyun Qian, Mohsen Lesani, Srikanth

V. Krishnamurthy, Paul Yu

ACM SIGSOFT International Symposium on Foundations of Software Engineering, FSE 2020.

Tool Recording

Linux Kernel Security, Static Analysis, Symbolic Execution

Selected Patches for Linux kernel: [Patch1] [Patch2] [Patch3]

[Poster1] Poster: Assisting Static Analysis with Large Language Models: A ChatGPT Experiment

Haonan Li, Yu Hao, **Yizhuo Zhai**, Zhiyun Qian

2023 IEEE Symposium on Security and Privacy (S&P 2023)

AWARDS & HONORS

2022	CCS Student Travel Grant
2019	S&P Student Travel Grant
2016	Dean's Distinguished Fellowship Award at University of California, Riverside
	Presidents Volunteer Award (Bronze) at University of Limerick, Ireland
2015	First Prize First Prize Department Scholarship at Xidian University
2014	National Scholarship (top 1%) at Xidian University
	Special Scholarship at Xidian University
2013	First Prize Department Scholarship at Xidian University
	Special Scolarship at Xidian University
2011	First Prize at China High School Biology Olympiad (Shanxi Province, rank 33)
	Second Prize at China High School Biology Olympiad (National)
2009	First Prize at Junior High School Biology Competition (Shanxi Province)

REFERENCES

Zhiyun Qian Everett and Imogene Ross Professor

Computer Science and Engineering department, University of California, Riverside, USA Contact: zhiyunq at cs.ucr.edu

Srikanth V. Krishnamurthy Professor, IEEE Fellow

Computer Science and Engineering department, University of California, Riverside, USA

Contact: krish at cs.ucr.edu