

Jun ZENG

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Homepage: <https://jun-zeng.github.io>

EDUCATION

National University of Singapore (NUS), Singapore

August 2018-June 2023

Program: PH.D. in Computer Science

Advisor: Zhenkai Liang GPA: 4.9/5.0

Huazhong University of Science and Technology (HUST), China

September 2014-June 2018

Program: Bachelor of Engineering in Computer Science and Technology

Advisor: Deqing Zou GPA: 91/100 Grade Ranking: 4/241

RESEARCH INTERESTS

System Auditing, Program Analysis, Recommendation, Forensic Investigation, Trusted Execution Environment

PUBLICATIONS

[1] **Automatic Root Cause Analysis via Large Language Models for Cloud Incidents.**

Yinfang Chen, Huaibing Xie, Minghua Ma, Yu Kang, Xin Gao, Liu Shi, Yunjie Cao, Xuedong Gao, Hao Fan, Ming Wen, **Jun Zeng**, Supriyo Ghosh, Xuchao Zhang, Qingwei Lin, Saravan Rajmohan, Dongmei Zhang, Tianyin Xu

In Proceedings of the 19th European Conference on Computer Systems (EuroSys), 2024

[2] **Learning Graph-based Code Representations for Source-level Functional Similarity Detection.**

Jiahao Liu*, **Jun Zeng***, Xiang Wang, Zhenkai Liang. (* co-primary authors)

In Proceedings of the 45th International Conference on Software Engineering (ICSE), 2023

[3] **PALANTIR: Optimizing Attack Provenance with Hardware-enhanced System Observability.**

Jun Zeng*, Chuqi Zhang*, Zhenkai Liang. (* co-primary authors)

In Proceedings of the 29th ACM Conference on Computer and Communications Security (CCS), 2022

[4] **FLOWMATRIX: GPU-Assisted Information-Flow Analysis through Matrix-based Representation.**

Kaihang Ji, **Jun Zeng**, Yuancheng Jiang, Zhenkai Liang, Zheng Leong Chua, Prateek Saxena, and Abhik Roychoudhury.

In Proceedings of the 31st USENIX Security Symposium (USENIX Security), 2022

[5] **SHADEWATCHER: Recommendation-guided Cyber Threat Analysis using System Audit Records.**

Jun Zeng, Xiang Wang, Jiahao Liu, Yinfang Chen, Zhenkai Liang, Tat-Seng Chua, and Zheng Leong Chua.

In Proceedings of the 43rd IEEE Symposium on Security and Privacy (Oakland), 2022

[6] **ATTACKG: Constructing Technique Knowledge Graph from Cyber Threat Intelligence Reports.**

Zhenyuan Li, **Jun Zeng**, Yan Chen, Zhenkai Liang.

In Proceedings of the 27th European Symposium on Research in Computer Security (ESORICS), 2022

[7] **Poster: Towards Automated and Large-scale Cyber Attack Reconstruction with APT Reports.**

Zhenyuan Li, Ahmad Soltani, Anis Yusof, Aris Cahyadi Risdianto, Kang Huang, **Jun Zeng**, Zhenkai Liang, Yan Chen.

In Proceedings of the 29th Annual Network and Distributed System Security Symposium (NDSS), 2022

[8] **TELL: Log Level Suggestions via Modeling Multi-level Code Block Information.**

Jiahao Liu, **Jun Zeng**, Xiang Wang, Kaihang Ji, and Zhenkai Liang.

In Proceedings of the 31st ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA), 2022

[9] **WATSON: Abstracting Behaviors from Audit logs via Aggregation of Contextual Semantics.**

Jun Zeng, Zheng Leong Chua, Yinfang Chen, Kaihang Ji, Zhenkai Liang, and Jian Mao.

In Proceedings of the 28th Annual Network and Distributed System Security Symposium (NDSS), 2021

[10] **Enhancing SSD Performance with LDPC-aware Garbage Collection.**

Yajuan Du, Yunpei Jia, Meng Zhang, **Jun Zeng**, Chun Jason Xue.

In Proceedings of the 6th Non-Volatile Memory Systems and Applications Symposium (NVMSA), 2017

WORK EXPERIENCE

Huawei (research scientist), Hangzhou, China

August 2023-Present

Department: ICT

Apple (intern), Shanghai, China

March 2018-July 2018

Department: Hardware Test Engineering

Project: Xaiver Design

National University of Singapore (intern), Singapore

July 2017-August 2017

Department: NUS Research Institute

Project: Cloud Computing

HONORS & AWARDS

Outstanding Student awarded by HUST (1/100)

2016

National Scholarship (1/50)

2017

Merit Student awarded by HUST (1/30)

2017

Pacemaker to Merit Student awarded by HUST (20/35000)

2017

Research Scholarship by NUS

2018

Dean's Graduate Research Excellence Award

2023

Student Travel Grant for S&P 2020/2021/2022, USENIX Security 2020, NDSS 2021

TEACHING ASSISTANT

Web Security (CS5331)

NUS, School of Computing

August 2018-December 2018

Introduction to Information Security (CS2107)

NUS, School of Computing

January 2019-May 2019

Introduction to Information Security (CS2107)

NUS, School of Computing

August 2019-December 2019

Web Security (CS5331)

NUS, School of Computing

January 2020-May 2020

Introduction to Information Security (CS2107)

NUS, School of Computing

August 2020-December 2020

Web Security (CS5331)

NUS, School of Computing

January 2021-May 2021

INVITED TALKS

Investigating Security Incidents with System Auditing and Analysis

Huawei, Munich, Germany (Virtually)

March 2023

Zhejiang University, Zhejiang, China

February 2023

ATTACKG: Constructing Technique Knowledge Graph from Cyber Threat Intelligence Reports

Copenhagen, Denmark

September 2022

SHADEWATCHER: Recommendation-guided Cyber Threat Analysis using System Audit Records

San Francisco, CA

May 2022

WATSON: Abstracting Behaviors from Audit logs via Aggregation of Contextual Semantics

Virtually

February 2021