JINWEN WANG

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https://j1nwenwang.github.io

EDUCATION

Washington University in St. Louis

Sep 2019 - Present

Ph.D. in Computer Science (GPA 3.88/4.0)

Tsinghua University

Sep 2016 - Jun 2019

M.S. in Computer Science (Rank 2/29)

Sichuan University

Sep 2012 - Jun 2016

B.E. in Computer Science (Rank Top 10%)

RESEARCH INTERESTS

System Security, Software Security, Cyber-Physical System

PUBLICATIONS

Main Conference Papers

[Security 23] ARI: Attestation of Real-time Mission Execution Integrity. Jinwen Wang, Yujie Wang, Ao Li, Yang Xiao, Ruide Zhang, Wenjing Lou, Y. Thomas Hou, and Ning Zhang, USENIX Security, 2023.

[DAC 23] IP Protection in TinyML. Jinwen Wang, Yuhao Wu, Han Liu, Bo Yuan, Roger Chamberlain, and Ning Zhang, ACM/IEEE Design Automation Conference, 2023, (Acceptance Rate: 23%)

[RTNS 23] A Procrastinating Control-Flow Integrity Framework for Periodic Real-Time Systems. Tanmaya Mishra, Jinwen Wang, Thidapat Chantem, Ryan Gerdes and Ning Zhang, International Conference on Real-Time Networks and Systems, 2023.

[Oakland 22] RT-TEE: Real-time System Availability for Cyber-physical Systems using ARM TrustZone. Jinwen Wang, Ao Li, Haoran Li, Chenyang Lu, and Ning Zhang, *IEEE Symposium on Security and Privacy*, 2022, (Acceptance Rate: 147/1012=14.5%).

[IROS 22] From Timing Variations to Performance Degradation: Understanding and Mitigating the Impact of Software Execution Timing in SLAM. As Li, Han Liu, Jinwen Wang, and Ning Zhang, IEEE/RSJ International Conference on Intelligent Robots and Systems, 2022.

Workshop Papers

[VehicleSec 23] Demo: Real-time System Availability for Cyber-physical Systems using ARM TrustZone. Jinwen Wang, Ao Li, Haoran Li, Chenyang Lu, and Ning Zhang, Inaugural Symposium on Vehicle Security and Privacy.

[RTSS 22] Work-in-Progress: Measuring Security Protection in Real-time Embedded Firmware. Yuhao Wu, Yujie Wang, Shixuan Zhai, Zihan Li, Ao Li, Jinwen Wang, and Ning Zhang, IEEE Real-Time Systems Symposium, 2022.

[CCS 21] Chronos: Timing Interference as a New Attack Vector on Autonomous Cyber-physical Systems. Ao Li, Jinwen Wang, and Ning Zhang, ACM SIGSAC Conference on Computer and Communications Security, 2021.

SKILLS

Programming languages: including C, C++, and Python.

Kernel Programming: Linux kernel modification, device driver modification. Compiler Customization: Software Instrumentation using LLVM, GCC.

Reverse Engineering: Ghidra

AWARDS

Qualcomm Best Demo Award Runner Up	2023
Travel Grant in RTSS	2022
Dean's International Fellowship (Top 1%)	2019
China National Scholarship (Top 1%)	2013

SERVICES

Subreviewers:

IEEE/ACM Transactions on Networking

External Reviewer:

2023: ACM Asia CCS

2022: ACM CCS, ACM Asia CCS, IEEE INFOCOM

2021: ISOC NDSS, IEEE INFOCOM 2020: ISOC NDSS, IEEE INFOCOM

2019: IEEE INFOCOM