JINWEN WANG

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 (first or co-first author publications highlighted)

[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.** Ao 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*, 2023.

[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

Kernel Programming: Linux kernel modification, device driver modification.
Compiler Customization: LLVM, GCC.
Trusted Execution Environment (TEE): Arm TrustZone, Intel SGX.
Reverse Engineering: Ghidra, IDA.
Programming languages: C, C++, and Python.

AWARDS

Qualcomm Best Demo Award Runner Up	*2023*
Travel Grant in RTSS	*2022*
Dean's International Fellowship	*2019*
National Scholarship in China	*2013*

SERVICES

Subreviewers:
IEEE/ACM Transactions on Networking
External Reviewer:

IEEE EuroS&P, ACM Asia CCS	*2023*
ACM CCS, ACM Asia CCS, IEEE INFOCOM	*2022*
ISOC NDSS, IEEE INFOCOM	*2021*
ISOC NDSS, IEEE INFOCOM	*2020*
IEEE INFOCOM	*2019*