

Yier Jin

Co-Founder and CTO
SiliconAssurance LLC

Courtesy Associate Professor
Department of Electrical and Computer Engineering
University of Florida

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RESEARCH INTERESTS

- Hardware and Integrated Circuit Security
- Internet of Things (IoT) and Cyber-Physical System (CPS) Design
- Functional programming and formal verification for trusted IP cores
- Trusted and resilient high-performance computing platforms
- Hardware-software co-design for system level security and protection
- Internet of Things (IoT) security

EDUCATION

Yale University, New Haven, Connecticut, USA

Ph.D. in Electrical Engineering, December 2012

Advisor: Yiorgos Makris

Thesis Title: “Trusted Integrated Circuits”

Zhejiang University, Hangzhou, China

M.S. in Electrical Engineering, June 2007

Advisors: Shiju Li, Xiaolang Yan and Haibin Shen

Thesis Title: “High Performance Finite Field Multipliers”

B.S. in Electrical Engineering, June 2005

Honors Graduate

PROFESSIONAL POSITIONS

Co-Founder and CTO
SiliconAssurance LLC

2021 - Present

Courtesy Associate Professor
Department of Electrical and Computer Engineering
University of Florida

2021 - Present

Co-Chair
Hardware Security and Trust Technical Committee (HSTTC)
IEEE Council on Electronic Design Automation (CEDA)

2020 - Present

Associate Professor
Department of Electrical and Computer Engineering
University of Florida

2017 - 2021

IoT Warren B. Nelms Term Professor and Academic Director
The Warren B. Nelms Institute for the Connected World
Herbert Wertheim College of Engineering, University of Florida

2017 - 2021

Member
Curriculum Sub-committee
State University System of Florida (SUSF) Cybersecurity Advisory Council

2019 - Present

Associate Director
National MicroElectronics Security Training Program (MEST) Center
Nimbus - University of Florida - Ohio State University

2019 - Present

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|---|--------------------------|
| <i>Distinguished Lecturer</i> IEEE Council on Electronic Design Automation (CEDA) | 2019 - Present |
| <i>Assistant Professor</i> Department of Electrical Engineering and Computer Science University of Central Florida | 2013 - 2017 |
| <i>Associate Partner</i> Intel Collaborative Research Institute for Secure Computing | 2014 - 2017 |
| <i>Cyber-Physical System Security Subcommittee Chair</i> IEEE Technical Committee on Cybernetics for Cyber-Physical Systems (CCPS) | 2015 - 2016 |
| <i>Member</i> Florida Institute for Cyber Security (FICS) at the University of Florida | 2015 - Present |
| <i>Member</i> State University System of Florida (SUSF) Cybersecurity Advisory Council | 2019 - Present |
| <i>Member</i> VLSI Systems and Applications Technical Committee (VSA-TC), IEEE Circuits and Systems Society (CASS) | 2016 - Present |
| <i>Visiting Faculty</i> AFRL Visiting Faculty Research Program | Summer 2016, Summer 2017 |

HONORS DISTINCTIONS

- **Best Paper Award Nomination**, Asian and South Pacific Design Automation Conference (ASP-DAC), 2021
- **Best Paper Award**, IEEE Asian Hardware Oriented Security and Trust Symposium (AsianHOST), 2020
- **Ernest S. Kuh Early Career Award**, IEEE Council on Electronic Design Automation (CEDA), 2020
- **International Educator of the Year (Junior Faculty)**, Herbert Wertheim College of Engineering, University of Florida, 2019
- **Distinguished Lecturer**, IEEE Council on Electronic Design Automation (CEDA), 2019
- **Best Paper Award**, Design, Automation and Test in Europe Conference and Exhibition (DATE), 2019
- **Best Paper Award Nomination**, Design, Automation and Test in Europe Conference and Exhibition (DATE), 2019
- **Young Investigator Award**, Office of Naval Research (ONR), 2019
- **Best Paper Award**, ACM Great Lakes Symposium on VLSI (GLSVLSI), 2018
- **ACM TODAES Best Paper**, ACM Transactions on Design Automation of Electronic Systems (TODAES), 2018
- **Best Paper Award Nomination**, Asian and South Pacific Design Automation Conference (ASP-DAC), 2018
- **Best Paper Award Nomination**, International Conference on Computer Aided Design (ICCAD), 2017
- **IoT Warren B. Nelms Term Professorship**, University of Florida, 2017 - Present
- **Best Paper Award**, IEEE International Symposium on Hardware Oriented Security and Trust (HOST), 2017

- **Outstanding New Faculty Award**, ACM’s Special Interest Group on Design Automation (SIGDA), 2017
- ACM Computing Reviews Notable Computing Books and Articles 2016, Hardware Category
- **Early CAREER Award**, Department of Energy (DoE), 2016
- **Best Paper Award**, Asian and South Pacific Design Automation Conference (ASP-DAC), 2016
- **First Place Award** (2011, 2016), **Second Place Award** (2008, 2013, 2014, 2015), **Third Place Award** (2009), New York University Cyber Security Awareness Week (CSAW) - Embedded System Challenge
- **Young Investigator Grant**, Southeastern Center for Electrical Engineering Education (SCEEE), 2015
- **Second Place Award**, CyberSEED IoT Security Challenge, University of Connecticut, 2015
- **Best Paper Award**, Design Automation Conference (DAC), 2015
- Travel Award, NSF-SRC-SIGDA-DAC Design Automation Summer School, 2009
- Honor Graduate, Zhejiang Provincial Institution of Higher Learning, The Educational Office of Zhejiang Province, China, 2005
- Excellent Graduate Award, Zhejiang University, 2005
- Undergraduate Scholarship, Zhejiang University, 2001–2005

PUBLICATIONS

A. BOOK

1. **Yier Jin** and Gang Qu, “Hardware Security”, Publishing House of Electronics Industry, 2021.

B. BOOK CHAPTER

1. Charles A. Kamhoua Laurent L. Njilla Alexander Kott Sachin Shetty (Editors), “Modeling and Design of Secure Internet of Things,” Wiley, 2020 (Orlando Arias, Fahim Rahman, Mark Tehranipoor, **Yier Jin**, “Chapter 19. IoT Device Attestation”)
2. Yuan Cao and Chip Hong Chang (Editors), “Frontiers in Hardware Security and Trust: Theory, Design and Practice,” IET, 2020 (Jiaji He, Xialong Guo, Yiqiang Zhao and **Yier Jin**, “Chapter 5. Formal Verification for SoC Security”)
3. Per Larsen, and Ahmad-Reza Sadeghi (Editors), “The Continuing Arms Race - Code-Reuse Attacks and defenses,” Morgan & Claypool, 2018 (**Yier Jin**, Dean Sullivan, Orlando Arias, Ahmad-Reza Sadeghi, and Lucas Davi, “Chapter 7. Hardware Control Flow Integrity”)
4. Hiroto Yasuura, Chong-Min Kyung, Yongpan Liu, and Youn-Long Lin (Editors), “Smart Sensors at the IoT Frontier,” Springer, 2017 (Orlando Arias, Kelvin Ly, and **Yier Jin**, “Security and Privacy in IoT Era”)
5. S. Bhunia, S. Ray, and S. Sur-Kolay (Editors), “Fundamentals of IP and SoC Security - Design, Verification and Debug,” Springer, 2017 (Xiaolong Guo, Raj Gautam Dutta, and **Yier Jin**, “Chapter 10. IP Trust Validation Using Proof-Carrying Hardware”)
6. Prabhat Mishra, Swarup Bhunia, and Mark Tehranipoor (Editors), “Hardware IP Security and Trust,” Springer, 2017 (Raj Gautam Dutta, Xiaolong Guo and **Yier Jin**, “Chapter 4. IP Trust: The Problem and Design/Validation-Based Solution”)
7. Chip-Hong Chang, Miodrag Potkonjak (Editors), “Secure System Design and Trustable Computing,” Springer, 2016 (**Yier Jin**, Dimitry Maliuk, Yiorogs Makris, “Chapter 7. Hardware Trojan Detection in Analog/RF Integrated Circuits”)

8. Mark Tehranipoor, Cliff Wang (Editors), “Introduction to Hardware Security and Trust,” Springer, 2011 (**Yier Jin**, Eric Love, Yiorgos Makris, “Chapter 16. Design for Hardware Trust”)

C. JOURNAL PUBLICATIONS

1. Raj Gautam Dutta, Yaodan Hu, Feng Yu, Teng Zhang, and **Yier Jin**, “Design and Analysis of Secure Distributed Estimator for Vehicular Platooning in Adversarial Environment,” *IEEE Transactions on Intelligent Transportation Systems (TITS)*, vol. 23, no. 4, pp. 3418-3429, 2022.
2. Max Panoff, Honggang Yu, Haoqi Shan, and **Yier Jin**, “A Review and Comparison on AI Enhanced Side Channel Analysis,” *ACM Journal on Emerging Technologies in Computing Systems (JETC)*, 2022. (early access)
3. Kejun Chen, Orlando Arias, Qingxu Deng, Daniela Oliveira, Xiaolong Guo, and **Yier Jin**, “FineDIFT: Fine-Grained Dynamic Information Flow Tracking for Data-Flow Integrity using Coprocessor,” *IEEE Transactions on Information Forensics and Security (TIFS)*, vol. 17, pp. 559-573, 2022.
4. Jiaji He, Xiaolong Guo, Mark Tehranipoor, Apostol Vassilev, and **Yier Jin**, “EM Side Channels in Hardware Security: Attacks and Defenses,” *IEEE Design & Test on Computers (D&T)*, vol. 39, no. 2, pp. 100-111, 2022.
5. Yen-Cheng Chiu, Tung-Cheng Chang, Chun-Ying Lee, Je-Min Hung, Kuang-Tang Chang, Cheng-Xin Xue, Ssu-Yen Wu, Hui-Yao Kao, Peng Chen, Hsiao-Yu Huang, Shih-Hsih Teng, Chieh-Pu Lo, Yi-Chun Shih, Yu-Der Chih, Tsung-Yung Jonathan Chang, **Yier Jin**, Meng-Fan Chang, “A 22nm 1Mb 1024b-Read Data-Protected STT-MRAM Macro with Near-Memory Shift-and-Rotate Functionality and 42.6GB/s Read Bandwidth for Security-Aware Mobile Device,” *IEEE Journal of Solid-State Circuits (JSSC)*. (early access)
6. Kaveh Shamsi and **Yier Jin**, “In Praise of Exact-Functional-Secrecy in Circuit Locking,” *IEEE Transactions on Information Forensics and Security (TIFS)*, vol. 16, pp. 5225-5238, 2021.
7. Jiaji He, Haocheng Ma, Max Panoff, Hanning Wang, Yiqiang Zhao, Leibo Liu, Xiaolong Guo, and **Yier Jin**, “Security Oriented Design Framework for EM Side-Channel Protection in RTL Implementations,” *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*. (to appear)
8. Christopher Brant, Prakash Shrestha, Benjamin Mixon-Baca, Kejun Chen, Said Varlioglu, Nelly Elsayed, **Yier Jin**, Jedidiah Crandall, and Daniela Oliveira, “Challenges and Opportunities for Practical and Effective Dynamic Information Flow Tracking,” *ACM Computing Surveys (CSUR)*, vol. 55, no. 1, pp. 1-33, 2021.
9. Kejun Chen, Xiaolong Guo, Qingxu Deng, **Yier Jin**, “Dynamic Information Flow Tracking: Taxonomy, Challenges, and Opportunities,” *Micromachines. Special Issue Hardware Security Attacks and Countermeasures in Integrated Circuits*, vol. 12, no. 8, pp. 898:1-898-16, 2021.
10. Haocheng Ma, Jiaji He, Max Panoff, **Yier Jin** and Yiqiang Zhao, “Automatic On-Chip Clock Network Optimization for Electromagnetic Side-Channel Protection,” *IEEE Journal on Emerging and Selected Topics in Circuits and Systems (JETCAS)*, vol. 11, no. 2, pp. 371-382, 2021.
11. Max Panoff, Raj Gautam Dutta, Yaodan Hu, Kaichen Yang, and **Yier Jin**, “On Sensor Security in the Era of IoT and CPS,” *Springer Nature Computer Science (SNCS)*, vol. 2, pp. 51:1-51:14, 2021.
12. Haocheng Ma, Jiaji He, Yanjiang Liu, Leibo Liu, Yiqiang Zhao, and **Yier Jin**, “Security-Driven Placement and Routing Tools for Electromagnetic Side Channel Protection,” *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, vol. 40, no. 6, pp. 1077 - 1089, 2021.

13. Ali Sayghe, Yaodan Hu, Ioannis Zografopoulos, XiaoRui Liu, Raj Gautam Dutta, **Yier Jin**, Charalambos Konstantinou, "A Survey of Machine Learning Methods for Detecting False Data Injection Attacks in Power Systems," *IET Smart Grid*, vol. 3, no. 5, pp. 581-595, 2020.
14. Feng Yu, RajGautam Dutta, Teng Zhang, Yaodan Hu and **Yier Jin**, "Fast Attack-Resilient Distributed State Estimator for Cyber-Physical Systems," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, vol. 39, no. 11, pp. 3555-3565, 2020.
15. Orlando Arias, Dean Sullivan, Haoqi Shan and **Yier Jin**, "SaeCAS: Secure Authenticated Execution using CAM-based Vector Storage," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, vol. 39, no. 11, pp. 4078-4089, 2020.
16. Yajun Yang, Zhang Chen, Yuan Liu, Pingqiang Zhou, Tsung-Yi Ho, and **Yier Jin**, "How Secure is Split Manufacturing in Preventing Hardware Trojan?" *ACM Transactions on Design Automation of Electronic Systems (TODAES)*, vol. 25, no. 2, pp. 20:1-20:23, 2020.
17. Kaveh Shamsi, Meng Li, Kenneth Plaks, Saverio Fazzari, David Z. Pan, and **Yier Jin**, "IP Protection and Supply Chain Security through Logic Obfuscation: A Systematic Overview," *ACM Transactions on Design Automation of Electronic Systems (TODAES)*, vol. 24, no. 6, pp. 65:1-65:36, 2019.
18. Kaveh Shamsi, Travis Meade, Meng Li, David Pan, and **Yier Jin**, "On the Approximation Resiliency of Logic Locking and IC Camouflaging Schemes," *IEEE Transactions on Information Forensics and Security (TIFS)*, vol. 14, no. 2, pp. 347-359, 2019.
19. Meng Li, Kaveh Shamsi, Travis Meade, Zheng Zhao, Bei Yu, **Yier Jin**, and David Z. Pan, "Provably Secure Camouflaging Strategy for IC Protection," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, vol. 38, no. 8, pp. 1399-1412, 2019.
20. Jiaji He, Xiaolong Guo, Travis Meade, Raj Gautam Dutta, Yiqiang Zhao, **Yier Jin**, "SoC interconnection protection through formal verification," *Integration, the VLSI Journal*, vol. 64, pp. 143-151, 2019.
21. Yumin Hou, Hu He, Kaveh Shamsi, Yier Jin, Dong Wu, and Huaqiang Wu, "On-Chip Analog Trojan Detection Framework for Microprocessor Trustworthiness," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, vol. 38, no. 10, pp. 1820-1830, 2019.
22. Travis Meade, Kaveh Shamsi, Thao Le, Jia Di, Shaojie Zhang, and **Yier Jin**, "The Old Frontier of Reverse Engineering: Netlist Partitioning," *Journal of hardware and Systems Security (HASS)*, vol. 2, no. 3, pp. 201-213, 2018.
23. Sarah Amir, Bicky Shakya, Xiaolin Xu, **Yier Jin**, Swarup Bhunia, Mark Tehrani-poor, and Domenic Forte, "Development and Evaluation of Hardware Obfuscation Benchmarks," *Journal of Hardware and Systems Security (HASS)*, vol. 2, no. 2, pp. 142-161, 2018.
24. Kejun Chen, Shuai Zhang, Zhikang Li, Yi Zhang, Qingqu Deng, Sandip Ray, and **Yier Jin**, "Internet-of-Things Security and Vulnerabilities: Taxonomy, Challenges, and Practice," *Journal of Hardware and Systems Security (HASS)*, vol. 2, no. 2, pp. 97-110, 2018.
25. Xiaolong Guo, Raj Gautam Dutta, Prabhat Mishra, and **Yier Jin**, "Automatic Code Converter Enhanced PCH Framework for SoC Trust Verification," *IEEE Transactions on Very Large Scale Integration System (TVLSI)*, vol. 25, no. 12, pp. 3390-3400, 2017.
26. Juan Wang, Hong Zhi, Yuhan Zhang, and **Yier Jin**, "Enabling Security-enhanced Attestation With Intel SGX for Remote Terminal and IoT," *IEEE Transactions*

- on *Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, vol. 37, no. 1, pp. 88-96, 2018.
27. Jiaji He, Yiqiang Zhao, Xiaolong Guo, **Yier Jin**, “Hardware Trojan Detection through Chip-Free Electromagnetic Side-Channel Statistical Analysis,” *IEEE Transactions on Very Large Scale Integration System (TVLSI)*, vol. 25, no. 10, pp. 2939-2948, 2017.
 28. **Yier Jin**, Xiaolong Guo, Raj Gautam Dutta, Mohammad-Mahdi Bidmeshki, and Yiorgos Makris, “Data Secrecy Protection through Information Flow Tracking in Proof-Carrying Hardware IP (Part I: Framework Fundamentals),” *IEEE Transactions on Information Forensics and Security (TIFS)*, vol. 12, no. 10, pp. 2416-2429, 2017.
 29. Mohammad-Mahdi Bidmeshki, Xiaolong Guo, Raj Gautam Dutta, **Yier Jin**, and Yiorgos Makris, “Data Secrecy Protection through Information Flow Tracking in Proof-Carrying Hardware IP (Part II: Framework Automation),” *IEEE Transactions on Information Forensics and Security (TIFS)*, vol. 12, no. 10, pp. 2430-2443, 2017.
 30. Yu Liu, **Yier Jin**, Aria Nosratinia, and Yiorgos Makris, “Silicon Demonstration of Hardware Trojan Design and Detection in Wireless Cryptographic ICs,” *IEEE Transactions on Very Large Scale Integration Systems (TVLSI)*, vol. 25, no. 4, pp. 1506-1519, 2017.
 31. Jacob Wurm, **Yier Jin**, Yang Liu, Shiyan Hu, Kenneth Heffner, Fahim Rahman, and Mark Tehranipoor, “Introduction to Cyber-Physical System Security: A Cross-Layer Perspective,” *IEEE Transactions on Multi-Scale Computing Systems (TMSCS)*, vol. 3, no. 3, pp. 215-227, 2017.
 32. Travis Meade, Shaojie Zhang, and **Yier Jin**, “IP Protection Through Gate-Level Netlist Security Enhancement,” *Integration, the VLSI Journal*, vol. 58, pp. 563-570, 2017.
 33. Xiaolong Guo, Raj Gautam Dutta, and **Yier Jin**, “Eliminating the Hardware-Software Boundary: A Proof-Carrying Approach for Trust Evaluation on Computer Systems,” *IEEE Transactions on Information Forensics and Security (TIFS)*, vol. 12, no. 2, pp. 405-417, 2017.
 34. Yu Bi, Kaveh Shamsi, Jiann-Shiun Yuan, **Yier Jin**, Michael Niemier, and X. Sharon Hu, “Tunnel FET Current Mode Logic for DPA-Resilient Circuit Designs,” *IEEE Transactions on Emerging Topics in Computing (TETC)*, vol. 5, no. 3, pp. 340-352, 2017.
 35. Kan Xiao, Domenic Forte, **Yier Jin**, Ramesh Karri, Swarup Bhunia, and M. Tehranipoor, “Hardware Trojans: Lessons Learned After One Decade of Research,” *ACM Transactions on Design Automation of Electronic Systems (TODAES)*, vol. 22, no. 1, pp. 6:1-6:23, 2016. **2018 ACM TODAES Best Paper**
 36. Sandip Ray, **Yier Jin**, and Arijit Raychowdhury, “The Changing Computing Paradigm with Internet of Things: A Tutorial Introduction,” *IEEE Design & Test (D&T)*, vol. 33, issue. 2, pp. 76-96, 2016.
 37. Yu Bi, Kaveh Shamsi, Jiann-Shiun Yuan, Pierre-Emmanuel Gaillardon, Giovanni De Micheli, Xunzhao Yin, X. Sharon Hu, Michael Niemier, and **Yier Jin**, “Emerging Technology based Design of Primitives for Hardware Security,” *ACM Journal on Emerging Technologies in Computing Systems (JETC)*, vol. 13, issue 1, pp. 3:1-3:19, 2016.
 38. Orlando Arias, Jacob Wurm, Khoa Hoang, and **Yier Jin**, “Privacy and Security in Internet of Things and Wearable Devices,” *IEEE Transactions on Multi-Scale Computing Systems (TMSCS)*, vol. 1, issue 2, pp. 99-109, 2015.
 39. **Yier Jin**, “Introduction to Hardware Security,” *Electronics*, vol. 4, issue. 4, pp. 763-784, 2015.

40. Yu Bi, Jiann-Shiun Yuan, and **Yier Jin**, “Beyond the Interconnections: Split Manufacturing in RF Designs,” *Electronics*, vol. 4, issue. 3, pp. 541-564, 2015.
41. Daniela Oliveira, Nicholas Wetzels, Max Bucci, Jesus Navarro, Dean Sullivan, and **Yier Jin**, “Hardware-Software Collaboration for Secure Coexistence with Kernel Extensions,” *ACM SIGAPP Applied Computing Review (ACR)*, vol. 14, no. 3, pp. 22-35, September 2014.
42. Eric Love, **Yier Jin**, and Yiorgos Makris, “Proof-Carrying Hardware Intellectual Property: A Pathway to Trusted Module Acquisition,” *IEEE Transactions on Information Forensics and Security (TIFS)*, vol. 7, no. 1, pp. 25-40, January 2012.
43. **Yier Jin**, and Yiorgos Makris, “Hardware Trojans in wireless cryptographic integrated circuits,” *IEEE Design & Test on Computers (D&T)*, vol. 27, pp. 10-25, 2010.
44. Haibin Shen, and **Yier Jin**, “Low Complexity Bit Parallel Multiplier for $GF(2^m)$ Generated by Equally-Spaced Trinomials,” *Information Processing Letters (IPL)*, vol. 107, no. 6, 2008, pp. 211-215.
45. **Yier Jin**, Haibin Shen, Huafeng Chen, and Xiaolang Yan, “Research of Fast Modular Multiplier for a Class of Finite Fields,” *Journal of Electronics (China)*, vol. 25, no. 4, 2008, pp. 482-487.

**D.
CONFERENCE
PROCEEDINGS**

1. Haoqi Shan, Boyi Zhang, Zihao Zhan, Dean Sullivan, Shuo Wang, **Yier Jin**, “Invisible Finger: Practical Electromagnetic Interference Attack on Touchscreen-based Electronic Devices,” *IEEE Security and Privacy (Oakland)*, 2022. (to appear)
2. Zhaoxiang Liu, Orlando Arias, Weimin Fu, **Yier Jin** and Xiaolong Guo, “Inter-IP Malicious Modification Detection through Static Information Flow Tracking,” *Design, Automation and Test in Europe Conference and Exhibition (DATE)*, 2022.
3. Orlando Arias, Zhaoxiang Liu, Xiaolong Guo, **Yier Jin** and Shuo Wang, “RT-Sec: Automated RTL Code Augmentation for Hardware Security Enhancement,” *Design, Automation and Test in Europe Conference and Exhibition (DATE)*, 2022.
4. Weimin Fu, Orlando Arias, **Yier Jin**, and Xiaolong Guo, “Fuzzing Hardware: Faith or Reality?” *IEEE/ACM Symposium on Nanoscale Architectures*, 2022.
5. Xiaorui Liu, Yaodan Hu, Charalambos (Harrys) Konstantinou, and **Yier Jin**, “CHIMERA: A Hybrid Estimation Approach to Limit the Effects of False Data Injection Attacks,” *2021 IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids (SmartGridComm)*, 2021.
6. Xiaolong Guo, Song Han, X. Sharon Hu, **Yier Jin**, Fanxin Kong, and Michael Lemmon, “Towards Scalable, Secure, and Smart Mission-Critical IoT Systems: Review and Vision,” *International Conference on Embedded Software (EMSOFT)*, 2021.
7. Yichen Jiang, Huifeng Zhu, Haoqi Shan, Xiaolong Guo, Xuan Zhang and **Yier Jin**, “TRRScope: Understanding Target Row Refresh Mechanism for Modern DDR Protection,” *Hardware-Oriented Security and Trust (HOST)*, 2021.
8. Kaveh Shamsi and **Yier Jin**, “Circuit Deobfuscation from Power Side-Channels using Pseudo-Boolean SAT,” *International Conference On Computer Aided Design (ICCAD)*, 2021.
9. Yichen Jiang, Huifeng Zhu, Dean Sullivan, Xiaolong Guo, Xuan Zhang, and **Yier Jin**, “Quantifying Rowhammer Vulnerability for DRAM Security,” *Design Automation Conference (DAC)*, 2021.
10. Kaichen Yang, Xuan-Yi Lin, Yixin Sun, Tsung-Yi Ho, and **Yier Jin**, “3D-Adv: Black-Box Physical Adversarial Attacks against Deep Learning Models through 3D Sensors,” *Design Automation Conference (DAC)*, 2021.

11. Honggang Yu, Haoqi Shan, Max Panoff, and **Yier Jin**, “Cross-Device Profiled Side-Channel Attacks using Meta-Transfer Learning,” *Design Automation Conference (DAC)*, 2021.
12. Kaichen Yang, Tzungyu Tsai, Honggang Yu, Max Panoff, Tsung-Yi Ho, and **Yier Jin**, “Robust Roadside Physical Adversarial Attack Against Deep Learning in Lidar Perception Modules,” *ACM Asia Conference on Computer and Communications Security (ASIACCS)*, 2021, pp. 349–362.
13. Yaodan Hu, Xiaochen Xian and **Yier Jin**, “RADM: A Risk-Aware DER Management Framework with Real-time DER Trustworthiness Evaluation,” *12th ACM/IEEE International Conference on Cyber-Physical Systems (ICCPS)*, 2021, pp. 77-86.
14. Max Panoff, Ty Van Roy, and **Yier Jin**, “AutoEM: Automatic Trace Collection and DataAnalysis for Electromagnetic Side Channel Security,” *Government Microcircuit Applications and Critical Technology Conference (GOMACTech)*, 2021.
15. Aritra Dasgupta, Md Moshir Rahman, Orlando Arias, Luke Duncan, **Yier Jin**, and Swarup Bhunia, “RTLlock: Logic Locking at Register-Transfer Level,” *Government Microcircuit Applications and Critical Technology Conference (GOMACTech)*, 2021.
16. Huifeng Zhu, Xiaolong Guo, **Yier Jin**, and Xuan Zhang, “PCBench: Benchmarking of Board-Level Hardware Attacks and Trojans,” *26th Asia and South Pacific Design Automation Conference (ASP-DAC)*, 2021. **Best Paper Candidate**
17. Huifeng Zhu, Xiaolong Guo, **Yier Jin**, and Xuan Zhang, “PowerScout: A Security-Oriented Power Delivery Network Modeling Framework for Cross-Domain Side-Channel Analysis,” *Asian Hardware Oriented Security and Trust (AsianHOST)*, 2020. **Best Paper Award**
18. Jun Kuai, Jiaji He, Haocheng Ma, Yiqiang Zhao, Yumin Hou and **Yier Jin**, “WaLo: Security Primitive Generator for RT-Level Logic Locking and Watermarking,” *Asian Hardware Oriented Security and Trust (AsianHOST)*, 2020.
19. Yaodan Hu, Haoqi Shan, Raj Gautam Dutta and **Yier Jin**, “P2SA: Protecting Platoons from Stealthy Jamming Attack,” *Asian Hardware Oriented Security and Trust (AsianHOST)*, 2020.
20. Feng Yu, Yaodan Hu, Teng Zhang, and **Yier Jin**, “Resilient Distributed Estimator with Information Consensus for CPS Security,” *IEEE International Conference on Computer Design (ICCD)*, 2020.
21. Honggang Yu, Tsung-Yi Ho, **Yier Jin**, “CloudLeak: DNN Model Extractions from Commercial MLaaS Platforms,” *Black Hat USA*, 2020.
22. Yue Zhang, Jian Weng, Rajib Dey, **Yier Jin**, Zhiqiang Lin, and Xinwen Fu, “Breaking Secure Pairing of Bluetooth Low Energy in Mobile Devices Using Downgrade Attacks,” *The 29th USENIX Security Symposium (USENIX)*, 2020, pp. 37-54.
23. Nikolaos Sapountzis, Ruimin Sun, Xuetao Wei, **Yier Jin**, Jedidiah Crandall and Daniela Oliveira, “MITOS: Optimal Decisioning for the Indirect Flow Propagation Dilemma in Dynamic Information Flow Tracking Systems,” *IEEE International Conference on Distributed Computing Systems (ICDCS)*, 2020.
24. James Geist, Travis Meade, Shaojie Zhang and **Yier Jin**, “RELIC-FUN: Logic Identification through Functional Signal Comparisons,” *Design Automation Conference (DAC)*, 2020.
25. Jiaji He, Xiaolong Guo, Haocheng Ma, Yanjiang Liu, Yiqiang Zhao and **Yier Jin**, “Runtime Trust Evaluation and Hardware Trojan Detection Using On-Chip EM Sensors,” *Design Automation Conference (DAC)*, 2020.
26. Honggang Yu, Haocheng Ma, Kaichen Yang, Yiqiang Zhao, and **Yier Jin**, “DeepEM: Deep Neural Networks Model Recovery through EM Side-Channel Information Leakage,” *Hardware-Oriented Security and Trust (HOST)*, 2020.

27. Rachel Selina Rajarathnam, Yibo Lin, **Yier Jin**, and David Z. Pan, "ReGDS: A Reverse Engineering Framework from GDSII to Gate-level Netlist," *Hardware-Oriented Security and Trust (HOST)*, 2020.
28. Orlando Arias, Dean Sullivan, Haoqi Shan, and **Yier Jin**, "LAHEL: Lightweight Attestation Hardening Embedded Devices using Macrocells," *Hardware-Oriented Security and Trust (HOST)*, 2020.
29. Kaveh Shamsi and **Yier Jin**, "NEOS: Netlist Encryption and Obfuscation Suite," *Government Microcircuit Applications and Critical Technology Conference (GOMACTech)*, 2020.
30. Md Moshir Rahman, Travis Meade, **Yier Jin**, and Swarup Bhunia, "You Break I Fix: A Collaborative Approach for Strengthening Sequential Obfuscation of Hardware Intellectual Property," *Government Microcircuit Applications and Critical Technology Conference (GOMACTech)*, 2020.
31. Mohammad Mehdi Sharifi, Ramin Rajaei, Patsy Cadareanu, Pierre-Emmanuel Gaillardon, **Yier Jin**, Michael Niemier, and X. Sharon Hu, "A Novel TIGFET-based DFF Design for Improved Resilience to Power Side-Channel Attacks," *Design, Automation and Test in Europe Conference and Exhibition (DATE)*, 2020.
32. Honggang Yu, Kaichen Yang, Teng Zhang, Yun-Yun Tsai, Tsung-Yi Ho, and **Yier Jin**, "CloudLeak: Large-Scale Deep Learning Models Stealing Through Adversarial Examples," *Network and Distributed System Security Symposium (NDSS)*, 2020.
33. Tzungyu Tsai, Kaichen Yang, Tsung-Yi Ho, and **Yier Jin**, "Robust Adversarial Objects against Deep Learning Models," *Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI)*, 2020.
34. Kaichen Yang, Tzungyu Tsai, Honggang Yu, Tsung-Yi Ho, and **Yier Jin**, "Beyond Digital Domain: Fooling Deep learning Based Recognition System in Physical World," *Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI)*, 2020.
35. Kuei-Huan Chang, Po-Hao Huang, Honggang Yu, **Yier Jin**, and Ting-Chi Wang, "Audio Adversarial Examples Generation with Recurrent Neural Networks," *25th Asia and South Pacific Design Automation Conference (ASP-DAC)*, 2020, pp. 488-493.
36. Jiaji He, Haocheng Ma, Xiaolong Guo, Yiqiang Zhao, **Yier Jin**, "Design for EM Side-Channel Security through Quantitative Assessment of RTL Implementations," *25th Asia and South Pacific Design Automation Conference (ASP-DAC)*, 2020, pp. 62-67.
37. Haocheng Ma, Jiaji He, Yanjiang Liu, Yiqiang Zhao, and **Yier Jin**, "CAD4EM-P: Security-Driven Placement Tools for Electromagnetic Side Channel Protection," *Asian Hardware Oriented Security and Trust (AsianHOST)*, 2019.
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39. Kejun Chen, Qingxu Deng, Yumin Hou, **Yier Jin**, and Xiaolong Guo, "Hardware and Software Co-Verification from Security Perspective," *20th International Workshop on Microprocessor and SOC Test and Verification (MTV)*, 2019.
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42. **Yier Jin**, "Towards Hardware-Assisted Security for IoT Systems (Invited)," *IEEE Computer Society Annual Symposium on VLSI (ISVLSI)*, 2019.

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44. Kaveh Shamsi, David Z. Pan, and **Yier Jin**, "On the Impossibility of Approximation-Resilient Circuit Locking," *IEEE Symposium on Hardware Oriented Security and Trust (HOST)*, 2019.
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47. Honggang Yu, Kaichen Yang, and **Yier Jin**, "Deep Learning Application Attacks through Feature Manipulations," *Government Microcircuit Applications and Critical Technology Conference (GOMACTech)*, 2019.
48. Miao He, Jungmin Park, Adib Nahiyani, Aposto Vassilev, **Yier Jin**, Mark Tehranipoor, "RTL-PSC: Automated Power Side-Channel Leakage Assessment at Register-Transfer Level," *37th IEEE VLSI Test Symposium (VTS)*, 2019.
49. Kaveh Shamsi, Meng Li, David Pan, and **Yier Jin**, "KC2: Key-Condition Crunching for Fast Sequential Circuit Deobfuscation," *Design, Automation and Test in Europe Conference and Exhibition (DATE)*, 2019, pp. 534-539. **Best Paper Award Nomination**
50. Xiaolong Guo, Huifeng Zhu, **Yier Jin**, and Xuan Zhang, "When Capacitors Attack: Formal Method Driven Design and Detection of Charge-Domain Trojans," *Design, Automation and Test in Europe Conference and Exhibition (DATE)*, 2019, pp. 1706-1711. **Best Paper Award**
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52. Raj Gautam Dutta, Feng Yu, Teng Zhang, Yaodan Hu, and **Yier Jin**, "Security for Safety: A Path Toward Building Trusted Autonomous Vehicles," *International Conference On Computer Aided Design (ICCAD)*, 2018.
53. Meng Li, Kaveh Shamsi, **Yier Jin**, David Pan, "TimingSAT: Decamouflaging Timing-based Logic Obfuscation," *International Test Conference (ITC)*, 2018.
54. Thao Le, Lucas Weaver, Jia Di, Shaojie Zhang, and **Yier Jin**, "Hardware Trojan Detection and Functionality Determination for Soft IPs," *International Verification and Security Workshop (IVSW)*, 2018.
55. Jungmin Park, Xiaolin Xu, Domenic Forte, **Yier Jin**, and Mark Tehranipoor, "Power-based Side-Channel Instruction-level Disassembler," *Design Automation Conference (DAC)*, 2018.
56. Kaveh Shamsi, Meng Li, David Pan, and **Yier Jin**, "Cross-Lock: Dense Layout-Level Interconnect Locking using Cross-bar Architectures," *ACM Great Lakes Symposium on VLSI (GLSVLSI)*, 2018. **Best Paper Award**
57. Yumin Hou, Hu He, Kaveh Shamsi, **Yier Jin**, Dong Wu, Huaqiang Wu, "R2D2: Runtime Reassurance and Detection of A2 Trojan," *IEEE Symposium on Hardware Oriented Security and Trust (HOST)*, 2018.
58. Tao Liu, Wujie Wen, and **Yier Jin**, "SIN2: Stealth Infection on Neural Network - A Low-cost Agile Neural Trojan Attack Methodology," *IEEE Symposium on Hardware Oriented Security and Trust (HOST)*, 2018.

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60. Xiaolong Guo, Jiaji He, and **Yier Jin**, “Runtime SoC Trust Verification using Integrated Symbolic Execution and Solver,” *Government Microcircuit Applications and Critical Technology Conference (GOMACTech-18)*, 2018.
61. Tao Liu, **Yier Jin**, and Wujie Wen, “Trojan Attacks and Defenses on Deep Neural Network based Intelligent Computing Systems,” *Government Microcircuit Applications and Critical Technology Conference (GOMACTech-18)*, 2018.
62. Orlando Arias, Fahim Rahman, Mark Tehranipoor, and **Yier Jin**, “Device Attestation: Past, Present, and Future,” *Design, Automation and Test in Europe Conference and Exhibition (DATE)*, 2018.
63. Dean Sullivan, Orlando Arias, Travis Meade, and **Yier Jin**, “Microarchitectural Minefields: 4K-Aliasing Covert Channel and Multi-Tenant Detection in IaaS Clouds,” *Network and Distributed System Security Symposium (NDSS)*, 2018.
64. Tao Liu, Lei Jiang, **Yier Jin**, Gang Quan, and Wujie Wen, “PT-Spike: A Precise-Time-Dependent Single Spike Neuromorphic Architecture with Efficient Supervised Learning,” *23rd Asia and South Pacific Design Automation Conference (ASP-DAC)*, 2018. **Best Paper Nomination**
65. Qi Liu, Tao Liu, Zihao Liu, Yanzhi Wang, **Yier Jin**, and Wujie Wen, “Security Analysis and Enhancement of Model Compressed Deep Learning Systems under Adversarial Attacks,” *23rd Asia and South Pacific Design Automation Conference (ASP-DAC)*, 2018. **Best Paper Nomination**
66. Fahim Rahman, Mohammad Farmani, Mark Tehranipoor, and **Yier Jin**, “Hardware-assisted Cybersecurity for IoT Devices,” *18th International Workshop on Microprocessor and SOC Test and Verification (MTV)*, 2017.
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78. Kaveh Shamsi, Meng Li, Travis Meade, Zheng Zhao, David Z. Pan, and **Yier Jin**, "AppSAT: Approximately Deobfuscating Integrated Circuits," *IEEE Symposium on Hardware Oriented Security and Trust (HOST)*, 2017, pp. 46-51. **Best Paper Award**
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82. Zihao Liu, Wujie Wen, Lei Jiang, **Yier Jin**, and Gang Quan, "A Statistical STT-RAM Retention Model for Fast Memory Subsystem Designs," *22nd Asia and South Pacific Design Automation Conference (ASP-DAC)*, 2017, pp. 720-725.
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87. Travis Meade, Shaojie Zhang, Zheng Zhao, David Pan, and **Yier Jin**, "Gate-Level Netlist Reverse Engineering Tool Set for Functionality Recovery and Malicious Logic Detection," *International Symposium for Testing and Failure Analysis (ISTFA)*, 2016.
88. Raj Gautam Dutta, Xiaolong Guo, and **Yier Jin**, "Quantifying Trust in Autonomous System Under Uncertainties," *29th IEEE International System-on-Chip Conference (SOCC)*, 2016, pp. 362-367.
89. Meng Li, Kaveh Shamsi, Travis Meade, Zheng Zhao, Bei Yu, **Yier Jin**, and David Z. Pan, "Provably Secure Camouflaging Strategy for IC Protection," *International Conference On Computer Aided Design (ICCAD)*, 2016, pp. 28:1-28:8.

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91. Kelvin Ly and **Yier Jin**, "Security Challenges in CPS and IoT: from End-Node to the System," *IEEE Computer Society Annual Symposium on VLSI (ISVLSI)*, 2016, pp. 63-68.
92. Kelvin Ly and **Yier Jin**, "Security Studies on Wearable Fitness Trackers," *38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 2016.
93. Dean Sullivan, Orlando Arias, Lucas Davi, Per Larsen, Ahmad-Reza Sadeghi, and **Yier Jin**, "Strategy Without Tactics: Policy-Agnostic Hardware-Enhanced Control-Flow Integrity," *IEEE/ACM Design Automation Conference (DAC'16)*, 2016, pp. 83.2:1-6.
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98. Xiaolong Guo, Raj Gautam Dutta, Prabhat Mishra, and **Yier Jin**, "Scalable SoC Trust Verification using Integrated Theorem Proving and Model Checking," *IEEE Symposium on Hardware Oriented Security and Trust (HOST)*, 2016, pp. 124-129.
99. Kaveh Shamsi and **Yier Jin**, "Security of Emerging Non-Volatile Memories: Attacks and Defenses," *IEEE VLSI Test Symposium (VTS)*, 2016.
100. Sandip Ray, Swarup Bhunia, **Yier Jin**, and Mark Tehranipoor, "[Extended Abstract] Security Validation in IoT Space," *IEEE VLSI Test Symposium (VTS)*, 2016.
101. Yu Bi, Kaveh Shamsi, Jiann-Shiun Yuan, Francois-Xavier Standaert, and **Yier Jin**, "Leverage Emerging Technologies For DPA-Resilient Block Cipher Design," *Design, Automation and Test in Europe Conference and Exhibition (DATE)*, 2016, pp. 1538-1543.
102. An Chen, X. Sharon Hu, **Yier Jin**, Michael Niemier, Xunzhao Yin, "Using Emerging Technologies for Hardware Security Beyond PUFs," *Design, Automation and Test in Europe Conference and Exhibition (DATE)*, 2016, pp. 1544-1549.
103. Travis Meade, Shaojie Zhang, and **Yier Jin**, "Netlist Reverse Engineering for High-Level Functionality Reconstruction," in *21st Asia and South Pacific Design Automation Conference (ASP-DAC 2016)*, 2016, pp. 655-660. **Best Paper Award**
104. Jacob Wurm, Orlando Arias, Khoa Hoang, Ahmad-Reza Sadeghi and **Yier Jin**, "Security analysis on consumer and industrial IoT Devices," in *21st Asia and South Pacific Design Automation Conference (ASP-DAC 2016)*, 2016, pp. 519-524.
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106. Travis Meade, Shaojie Zhang, Mark Tehranipoor, and **Yier Jin**, "A Comprehensive Netlist Reverse Engineering Toolset for IC Trust," *Government Microcircuit Applications and Critical Technology Conference (GOMACTech-16)*, 2016, pp. 281-284.
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108. Kelvin Ly, Wei Sun, and **Yier Jin**, "Emerging Challenges in Cyber-Physical Systems: A Balance of Performance, Correctness, and Security," *IEEE Infocom CPSS Workshop*, 2016.
109. Sandip Ray, and **Yier Jin**, "Security Policy Enforcement in Modern SoC Designs," *International Conference On Computer Aided Design (ICCAD)*, 2015, pp. 345-350.
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111. Kaveh Shamsi, Yu Bi, **Yier Jin**, Pierre-Emmanuel Gaillardon, Michael Niemier and X. Sharon Hu, "Reliable and High Performance STT-MRAM Architectures based on Controllable-Polarity Devices," *IEEE International Conference on Computer Design (ICCD)*, 2015, pp. 372-379.
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113. Yu Bi, Jiann-Shiun Yuan, and **Yier Jin**, "Split Manufacturing in Radio-Frequency Designs," *The 2015 International Conference on Security and Management (SAM)*, 2015, pp. 204-210.
114. Lucas Davi, Matthias Hanreich, Debayan Paul, Ahmad-Reza Sadeghi, Patrick Koerberl, Dean Sullivan, Orlando Arias, and **Yier Jin**, "HAFIX: Hardware-Assisted Flow Integrity Extension," *IEEE/ACM Design Automation Conference (DAC)*, 2015. **Best Paper Award**
115. Xiaolong Guo, Raj Gautam Dutta, **Yier Jin**, Farimah Farahmandi, and Prabhath Mishra, "Pre-Silicon Security Verification and Validation: A Formal Perspective," *IEEE/ACM Design Automation Conference (DAC)*, 2015.
116. Yang Liu, Shiyuan Hu, Jie Wu, Yiyu Shi, **Yier Jin**, Yu Hu, and Xiaowei Li, "Impact assessment of net metering on smart home cyberattack detection," *IEEE/ACM Design Automation Conference (DAC)*, 2015.
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118. Jeff Biggers, Travis Meade, Shaojie Zhang, Youngok Pino, and **Yier Jin**, "Automated RTL Code Rebuilding through Netlist Analysis," *Government Microcircuit Applications and Critical Technology Conference (GOMACTech-15)*, 2015, pp. 155-158.
119. **Yier Jin**, "Innovative IoT Authentication Methods Leveraging Smart Sensors," *UCF Conference on Sensor Devices and Applications*, Oct 2015.
120. Ray Potter, **Yier Jin**, "Don't Touch That Dial: How Smart Thermostats Have Made Us Vulnerable," *RSA Conference*, 2015.
121. **Yier Jin**, "Security and Privacy in Internet of Things and Wearable Devices," *CHASE Conference on Secure/Trustworthy Systems and Supply Chain Assurance*, 2015.

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123. **Yier Jin**, "Design-for-Security vs. Design-for-Testability: A Case Study on DFT Chain in Cryptographic Circuits," *IEEE Computer Society Annual Symposium on VLSI (ISVLSI)*, 2014, pp. 19-24.
124. Dean Sullivan, Jeff Biggers, Guidong Zhu, Shaojie Zhang, and **Yier Jin**, "FIGHT-Metric: Functional Identification of Gate-Level Hardware Trustworthiness," *Design Automation Conference (DAC)*, 2014, pp. 173:1-173:4.
125. **Yier Jin**, and Dean Sullivan, "Real-Time Trust Evaluation in Integrated Circuits," *Design, Automation and Test in Europe Conference and Exhibition, (DATE)*, 2014.
126. **Yier Jin**, "EDA Tools Trust Evaluation through Security Property Proofs," *Design, Automation and Test in Europe Conference and Exhibition, (DATE)*, 2014.
127. **Yier Jin**, "Embedded System Security in Smart Consumer Electronics," *4th International Workshop on Trustworthy Embedded Devices (TrustED 2014)*, 2014, pp. 59-59.
128. **Yier Jin**, Grant Hernandez, and Daniel Buentello, "Smart Nest Thermostat: A Smart Spy in Your Home," *Black Hat USA*, 2014.
129. **Yier Jin**, and Daniela Oliveira, "Trustworthy SoC Architecture with On-Demand Security Policies and HW-SW Cooperation," *5th Workshop on SoCs, Heterogeneous Architectures and Workloads (SHAW-5)*, 2014.
130. **Yier Jin**, and Yiorgos Makris, "A Proof-Carrying Based Framework for Trusted Microprocessor IP," *IEEE/ACM International Conference on Computer-Aided Design (ICCAD)*, November 2013, pp. 824-829.
131. Yu Liu, **Yier Jin**, and Yiorgos Makris, "Hardware Trojans in Wireless Cryptographic ICs: Silicon Demonstration and Detection Method Evaluation," *IEEE/ACM International Conference on Computer-Aided Design (ICCAD)*, November 2013, pp. 399-404.
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133. **Yier Jin**, Bo Yang and Yiorgos Makris, "Cycle Accurate Information Assurance by Proof Carrying-Based Signal Sensitivity Tracing," *Proceedings of IEEE International Symposium on Hardware-Oriented Security and Trust (HOST)*, June 2013, pp. 99-106.
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137. **Yier Jin**, Dmitry Maliuk and Yiorgos Makris, "Post-Deployment Trust Evaluation in Wireless Cryptographic ICs," *Proceedings of the Design, Automation & Test in Europe (DATE)*, 2012, pp. 965-970.
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PANELS

1. Future of Side-Channels, *Intel Side Channel Academia Program (SCAP) Workshop*, October 2020
2. Secure Silicon: Recent Developments and Upcoming Challenges, *ACM SIGDA/IEEE CEDA 3rd Design Automation WebiNar (DAWN)*, August 2020
3. Hardware Anti-counterfeiting and Counterfeit Detection: State-of-the-art and Future Directions of Research, *Asian Hardware Oriented Security and Trust (Asian-HOST)*, December 2019
4. IoT Security: From Commercial Devices to Industrial Infrastructure, *The 2nd IEEE International Conference on Industrial Internet (ICII)*, November 2019
5. Securing the Internet of Things: Emerging Threats and Opportunities, *Cyber-Florida Research Symposium*, April 2019
6. Physical Inspection and Attacks: New Frontiers in Hardware Security, *International Test Conference (ITC)*, October 2018
7. AI Applications and Security, *Future Chips 2017: Smart Chips, Smart World*, December 2017
8. Hardware Security: Myth or Reality? *ACM/IEEE System Level Interconnect Prediction Workshop (SLIP)*, June 2016

9. Hardware IP Protection Through Invasive and Non-Invasive Analysis, *IEEE Symposium on Hardware Oriented Security and Trust (HOST)*, May 2016
10. Cyber Physical Systems Security: What Are the Challenges and Best Practices? *Florida Institute for Cybersecurity Research: Annual Conference on Cybersecurity*, February 2016
11. ATARC Visionary Panel - Mobile Technology of the Future, *ATARC Federal Mobile Computing Summit*, August 2015
12. Hacking Things: Security and Privacy Challenges in Internet of Things, *IEEE Conference on Communication and Network Security*, September 2015

TUTORIALS

1. **Yier Jin**, “Electromagnetic Side Channel Analysis,” *National Tsing Hua University*, March 2021. [Online Webinar]
2. **Yier Jin**, “Security and Forensics in the IoT Era: From Reverse Engineering to HoneyIoT,” *National MicroElectronics Security Training Center (MEST)*, April 2020. [Online Webinar]
3. Basel Halak, Maire O’Neill, **Yier Jin**, and Gang Qu, “Hardware-based Security Solutions for the Internet of Things,” *25th Asia and South Pacific Design Automation Conference (ASP-DAC)*, Beijing, China, January 2020.
4. **Yier Jin**, “IoT Training – Binary Analysis Using Open Source Toolset,” *National Cheng Kung University*, Tainan, Taiwan, December 2019.
5. **Yier Jin**, “Introduction to Hardware Security and Trust,” *International Workshop on Hardware Security*, Tsinchu, Taiwan, September 2019.
6. Basel Halak, Maire O’Neill, **Yier Jin**, and Gang Qu, “Hardware-based Security Solutions for the Internet of Things,” *Design, Automation and Test in Europe Conference and Exhibition (DATE)*, Florence, Italy, March 2019.
7. **Yier Jin**, and Xinwen Fu, “Security of Internet of Things (IoT) and Cyber-Physical Systems (CPS): A Hands on Approach,” *Design Automation Conference (DAC)*, San Francisco, CA, June 2018.
8. **Yier Jin**, “Introduction to Hardware and IoT Security,” *International Symposium on VLSI Design, Automation and Test (VLSI-DAT)*, Tsinchu, Taiwan, April 2018.
9. **Yier Jin**, “The The Emergence of Hardware Security,” *IEEE International Conference on Data Science in Cyberspace (DSC)*, Shenzhen, China, June 2017.
10. Chip Hong Chang, and **Yier Jin**, “The Emergence of Hardware Oriented Security and Trust,” *22nd Asia and South Pacific Design Automation Conference (ASP-DAC)*, Chiba, Japan, January 2017.
11. **Yier Jin**, “Introduction to Cyber-Physical System Security: From the Hardware Perspective,” *8th IEEE International Workshop on Information Forensics and Security (WIFS)*, Abu Dhabi, UAE, December 2016.
12. **Yier Jin** and Ahmad-Reza Sadeghi, “IoT Security and Privacy Challenges and Solutions,” *Embedded Systems Week (ESWEEK)*, Pittsburgh, PA, October 2016.

INVITED PRESENTATIONS

- **19th CCF Fault-Tolerant Computing Annual Conference**, December 2021
Title: CADforAssurance.ORG - A Community Effort to Promote Open Hardware Security (Host: Jiliang Zhang)
- **CCF Embedded System Annual Conference**, December 2021
Title: Cyber-Resilience in Autonomous CPS
- **CCF Computing System Annual Conference**, December 2021
Title: Hardware Security and IoT Security (Host: Yinqian Zhang)

- **IEEE CEDA Distinguished Lecturer Program** November 2021
 Title: Hardware-Assisted Cybersecurity for Internet of Things (Host: Mehdi Tahoori)
 Link: <https://ieee-ceda.org/presentation/distinguished-lecturer/hardware-supported-cybersecurity-iot>
- **Wuhan University** July 2021
 Title: Trusted Computing Frontier - From Microarchitecture to Power Distribution Network (Host: Juan Wang)
- **Cyber-Resilient Distributed Autonomous Energy Grid Virtual Workshop** May 2021
 Title: Role of Autonomy in Cyber-Resilience (Host: Richard Macwan)
- **UF Institute of Food and Agricultural Sciences (IFAS) AI Retreat** January 2021
 Title: AI and Food Security/Health (Host: Mike Gutter)
- **IEEE Computer Society North Jersey Chapter (Virtual)** November 2020
 Title: Artificial Intelligence and Hardware Security (Host: Hong Zhao)
- **International Symposium on Privacy Computing (PRICOM) keynote, (Virtual)** October 2020
 Title: CloudLeak: Large-Scale Deep Learning Models Stealing Through Adversarial Examples
- **International Symposium on VLSI Design, Automation and Test (VLSI-DAT), (Virtual)** August 2020
 Title: CAD for Security: A Full Reverse Engineering Toolchain from Layout to RTL
- **Embry-Riddle Aeronautical University, Daytona Beach, FL** March 2020
 Title: Security and Forensics in the IoT Era: From Reverse Engineering to HoneyIoT (Host: Houbing Song)
- **National Cheng Kung University, Tainan, Taiwan** December 2019
 Title: Hardware Supported Cybersecurity for IoT (Host: Chung-Ho Chen)
- **University of Cincinnati, Cincinnati, OH** December 2019
 Title: Analog Circuit Security in the Digital World
- **International Workshop on Hardware Security, Hsinchu, Taiwan** September 2019
 Title: Analog Circuit Security in the Digital World
- **1st International Summer School on Computational Forensics (SuCoFo2019), Lillehammer, Norway** August 2019
 Title: Security and Forensics in the IoT Era: From Reverse Engineering to HoneyIoT (Host: Katrin Franke)
- **Norwegian University of Science and Technology, Lillehammer, Norway** August 2019
 Title: How Can LEGO Help IoT Design and Security (Host: Geir Olav Dyrkolbotn)
- **Pacific Northwest National Laboratory, Richland, WA** August 2019
 Title: Power Distribution Network (PDN) based Attacks and Defenses (Host: Kevin Barker)
- **Infineon Technologies, Munich, Germany** August 2019
 Title: CAD for Security: A Full Reverse Engineering Toolchain from Layout to RTL (Host: Bernhard Lippmann)
- **Technical University of Munich, Munich, Germany** July 2019
 Title: CAD for Security: A Full Reverse Engineering Toolchain from Layout to RTL (Host: Ulf Schlichtmann)
- **2019 ASEE Annual Conference & Exposition, Tampa, FL** June 2019
 Title: Hands-on Robotics Bootcamp with TI-RSLK (Host: Mark Easley)

- **The Fourth IEEE International Workshop on Design Automation for Cyber-Physical Systems (DACPS), co-located with DAC**, Las Vegas, NV
June 2019
Title: GPS Spoofing Attack and its Impact on LIDAR Sensor
- **Hardware Security Workshop**, Hsinchu, Taiwan May 2019
Title: Enabling a Trustworthy Electronics Supply Chain from a Global Perspective
- **National Tsing Hua University**, Hsinchu, Taiwan May 2019
Title: Introduction to Hardware and IoT Security (Host: Tsung-Yi Ho)
- **Universidade Estadual de Campinas (UNICAMP)**, Sao Paulo, Brazil April 2019
Title: Hardware Supported Cybersecurity for IoT (Host: Anderson Rocha)
- **University of Texas at San Antonio**, San Antonio, TX March 2019
Title: Hardware Supported Cybersecurity for IoT (Host: Guen Chen)
- **LENNOX**, Dallas, TX March 2019
Title: An Overview of IoT Security: From Individual Devices to IoT Botnet (Host: Keith Mowery)
- **University of Southampton**, Southampton, UK February 2019
Title: Analog Circuit Security in the Digital World (Host: Basel Halak)
- **National Cheng Kung University**, Tainan, Taiwan December 2018
Title: Hardware Supported Cybersecurity for Internet of Things (Host: Chung-Ho Chen)
- **National Tsing Hua University**, Hsinchu, Taiwan December 2018
Title: Deep Learning Model Stealing Using Adversarial Examples (Host: Tsung-Yi Ho)
- **University of South Florida**, Tampa, FL November 2018
Title: Analog Circuit Security in the Digital World (Host: Srinivas Katkoori)
- **Security-Oriented Designs of Computer Architectures and Processors (SODCAP) Workshop (keynote), Co-Located with ACM CCS**, Toronto, Canada October 2018
Title: Architectural Security and Side-Channel Attacks on Modern Processors
- **2018 China Internet Security Conference**, Beijing, China Sep 2018
Title: “IoT and System Security: from the VLSI Perspective”
- **NSF CPS Security and Education**, Charlotte, NC July 2018
Title: “A Hands On Approach for CPS and IoT Security Education” (Host: Weichao Wang)
- **National Tsing Hua University**, Hsinchu, Taiwan April 2018
Title: “Hardware Security and Its Implication to Deep Neural Network” (Host: Tsung-Yi Ho)
- **Northwestern University**, Chicago, IL February 2018
Title: “Hardware Supported Cybersecurity for Internet of Things” (Host: Yan Chen)
- **18th International Workshop on Microprocessor/SoC Test, Security & Verification (keynote)**, Austin, TX December 2017
Title: “Hardware Supported Cybersecurity for Internet of Things” (Host: Sohrab Aftabjahani)
- **Invitational Workshop on Foundations and Challenges for Proactive and Dynamic Network Defense**, Tampa, FL November 2017
Title: “Proactive Defense in IoT Era: From a Hardware Perspective” (Host: Zhuo Lu)
- **University of Arkansas**, Fayetteville, AR November 2017
Title: “Hardware Supported Cybersecurity for Internet of Things” (Host: Jia Di)

- **ACM Special Interest Group on Design Automation (SIGDA) Annual Meeting**, Irvine, CA November 2017
Title: “Cross-Layer Research vs Cross-Layer Researcher Life: From an IoT Security Perspective” (Host: Yuan Xie and Vijaykrishnan Narayanan)
- **SCx3 Cybersecurity Conference (keynote)**, Melbourne, FL November 2017
Title: “The Evolution of Hardware-Assisted Computing Systems for IoT”
- **Discover Financial Services**, Gainesville, FL October 2017
Title: “Security Enhanced Gateway for Multi-layer Smart Home IoT Payment System Protection” (Host: David Nelms)
- **Texas Instrument**, Dallas, TX July 2017
Title: “Security Challenges for SoC Designs in Internet of Things Era” (Host: Christy She)
- **IEEE International Workshop on Design Automation for Cyber-Physical Systems**, Austin, TX June 2017
Title: “Security and Privacy Challenges in Internet of Things” (Host: Xin Li)
- **Warren B. Nelms Institute for the Connected World (Opening Ceremony), University of Florida**, Gainesville, FL April 2017
Title: “Security and Privacy Challenges in Internet of Things” (Host: John Harris)
- **Notre Dame University**, Notre Dame, IN February 2017
Title: “Internet of Things Design and Security from a Cross-Layer Perspective” (Host: Sharon Hu)
- **Texas A & M University**, College Station, TX February 2017
Title: “Internet of Things Design and Security from a Cross-Layer Perspective” (Host: Alex Sprintson)
- **Cisco**, Gainesville, FL February 2017
Title: “Internet of Things (IoT): Design and Security” (Host: Yousef Iskander)
- **University of Florida**, Gainesville, FL January 2017
Title: “Internet of Things Design and Security from a Cross-Layer Perspective” (Host: William Eisenstadt)
- **Florida Security Workshop**, Tampa, FL December 2016
Title: “IoT Security Training Platforms for Professionals and Engineers” (Host: Simon Ou)
- **Florida Center of Cybersecurity**, Tampa, FL October 2016
Title: “Demonstration: Trusted CPS Platform Development”
- **University of George**, Athens, GA September 2016
Title: “IoT Security: From a Cross-Layer Perspective” (Host: Kang Li)
- **EDA Workshop**, Hong Kong, China August 2016
Title: “Arm-Race on Logic Obfuscation and IC Camouflaging for IP Protection” (Host: Zili Shao)
- **Air Force Research Lab (AFRL)**, Rome NY August 2016
Title: “Security Challenges in CPS and IoT: from End-Node to the System” (Host: Charles Kamhoua and Kevin Kwiat)
- **Syracuse University**, Syracuse, NY July 2016
Title: “Security Vulnerability Database for IoT” (Host: Yanzhi Wang)
- **International Workshop on Hardware Security**, Beijing, China June 2016
Title: “Hardware’s Active Role in Cybersecurity” (Host: Xiaoxiao Wang)
- **University of Delaware**, Newark, DE May 2016
Title: “Introduction to Hardware Security: Past, Current and Future” (Host: Chengmo Yang)

- **The 4th Asia Workshop on Smart Sensor System (AWSSS 2016)**, Beijing, China March 2016
Title: “Security and Privacy in IoT Era: From Attack to Defense” (Host: Yongpan Liu)
- **FICS Annual Conference on Cybersecurity**, Gainesville, FL Feb 2016
Title: “IoT Security: From Hacking to Defense” (Host: Mark Tehranipoor and Patrick Traynor)
- **Cisco**, Gainesville, FL Dec 2015
Title: “Remote Assessment for IoT Security: Tools, Metrics, and Test Platforms” (Host: Bill Eklow)
- **National Institute of Standards and Technology (NIST)**, Gainesville, FL Dec 2015
Title: “Remote Assessment for IoT Security: Tools, Metrics, and Test Platforms” (Host: Donna Dodson)
- **University of Texas, San Antonio**, San Antonio, TX Nov 2015
Title: “Security and Privacy on IoT and Wearable Devices” (Host: Jianwei Niu)
- **ARO Workshop on Cryptography and Hardware Security for the Internet of Things**, College Park, MD Oct 2015
Title: “Case study on IoT Device Security and Privacy”
- **2015 China Internet Security Conference (Keynote Speech)**, Beijing, China Sep 2015
Title: “Smart vs. Security: IoT Security and Protections”
- **Notre Dame University**, Notre Dame, IN Sep 2015
Title: “Introduction to Hardware Security - Formal Methods, IoT Security, and Reverse Engineering” (Host: X. Sharon Hu)
- **NIST - Cybersecurity Innovation Forum**, Washington, DC Sep 2015
Title: “Hardware Trust and Integrity: The First Step Toward Securing Computer Systems” (Host: Andrew Regenscheid)
- **Cisco**, Gainesville, FL Sep 2015
Title: “IoT Security” (Host: Tony Jeffs)
- **National Security Campus**, Gainesville, FL Aug 2015
Title: “Introduction to Hardware Security - Formal Methods, IoT Security, and Reverse Engineering” (Host: Perry Tapp)
- **Honeywell - FICS**, Gainesville, FL Jun 2015
Title: “IoT/Hardware Security” (Host: Mark Tehranipoor)
- **Raytheon - FICS**, Gainesville, FL Jun 2015
Title: “Automated Functionality Rebuilding Through Netlist Reverse Engineering” (Host: Mark Tehranipoor)
- **Trustworthy Hardware Workshop** New York, NY Nov 2014
Title: “Computer System Protection through Run-time Hardware-Software Collaboration,” (Host: Ramesh Karri)
- **University of George**, Athens, GA Sep 2014
Title: “Computer System Protection through Hardware-Software Collaboration” (Host: Kang Li)
- **Pennsylvania State University**, State College, PA Sep 2014
Title: “Computer System Protection through Run-Time Hardware-Software Collaboration” (Host: Vijaykrishnan Narayanan)
- **University of Connecticut**, Storrs, CT Aug 2014
Title: “Embedded System Security in Smart Consumer Electronics: A Case Study on Google Nest Thermostat” (Host: Domenic Forte)

- **Information Sciences Institute/USC** Washington, D.C. May 2014
Title: “Security in Silicon - Challenges and Opportunities Ahead” (Host: Youngok Pino)
- **Intel Corp.** Hillsboro, OR Nov 2013
Title: “Proof-Carrying Based Trusted Embedded System Design and Secure SoC Integration” (Host: David Ott and Mukesh Ranjan)
- **Trustworthy Hardware Workshop** New York, NY Nov 2013
Title: “Trusted Embedded System Design Through the Unification of Trusted Third-Party Software Programs and Hardware IP Cores” (Host: Cliff Wang)
- **Northeastern University** Boston, MA Apr 2012
Title: “Trusted Integrated Circuits” (Host: Edmund Yeh)
- **University of New Mexico** Albuquerque, NM Apr 2012
Title: “Trusted Integrated Circuits” (Host: Nasir Ghani)
- **Stony Brook University** New York, NY Apr 2012
Title: “Trusted Integrated Circuits” (Host: Kenneth Short)
- **University of Maryland** College Park, MD Mar 2012
Title: “Trusted Integrated Circuits” (Host: Gang Qu)
- **George Mason University** Fairfax, VA Mar 2012
Title: “Trusted Integrated Circuits” (Host: Kris Gaj)
- **Illinois Institute of Technology** Chicago, IL Mar 2012
Title: “Trusted Integrated Circuits” (Host: Kui Ren)
- **Intel Corp.** Hillsboro, OR Jan 2012
Title: “Trusted Integrated Circuits and Proof Carrying-based Hardware Intellectual Property Protection” (Host: Dhinesh Manoharan)

TEACHING EXPERIENCE

Instructor for Courses Jul 2017 - Present
Electrical and Computer Engineering Department, University of Florida

- Undergraduate Course: EEL 4745C - Microprocessor Applications II (aka IoT Design)
- Undergraduate Course: ENG 1935 - Home Automation Fundamentals
- Graduate Course: EEL 5739 - IoT Security and Privacy

Instructor for Courses Dec 2012 - May 2017
Electrical and Computer Engineering Department, University of Central Florida

- Undergraduate Course: EEL 4742 - Embedded Systems
- Graduate Course: EEE 6347 - Trustworthy Hardware
- Graduate Course: EEE 5390C - Full Custom VLSI Design
- Undergraduate Course: EEE 4346C - Hardware Security and Trusted Circuit Design

Teaching Fellow Fall 2010, Fall 2008
School of Engineering and Applied Science, Yale University

- Graduate Course: EENG875 - Introduction to VLSI System Design

Teaching Fellow Spring 2010
School of Engineering and Applied Science, Yale University

- Undergraduate Course: EENG201b - Introduction to Computer Engineering

**OUTREACH
ACTIVITIES**

Faculty Mentor May 2018 - Aug 2018
Distributed Research Experiences for Undergraduates (DREU), Computing Research Association - Women (CRA-W)

Faculty Mentor Aug 2018 - June 2019
University Minority Mentor Program (UMMP), University of Florida

Faculty Mentor Summer 2019, Summer 2021
Summer Undergraduate Research at Florida (SURF), University of Florida

**CURRENT
POST-DOCS**

- Zihan Zhao since Oct 2021

**CURRENT
PHD STUDENTS**

- Orlando Arias since Aug 2016
- Haoqi Shan since Jan 2018
- Yichen Jiang since May 2018
- Yaodan Hu since May 2018
- Kaichen Yang since May 2018
- Christopher Brant since Aug 2019 (co-advised by Dr. Daniela Oliveira)
- Max Panoff since Aug 2019
- Guangyu Zhu since Aug 2020 (co-advised by Dr. Michael Fang)
- Honggang Yu since Aug 2021 (co-advised by Dr. Shuo Wang)
- Michael Lee since Aug 2021 (co-advised by Dr. Shuo Wang)
- Hanqiu Wang since Aug 2021 (co-advised by Dr. Shuo Wang)

**PREVIOUS
POST-DOCS**

- Yumin Hou
- Raj Gautam Dutta

**PREVIOUS
PHD STUDENTS**

- Dean Sullivan
First Position: Tenure Track Assistant Professor at the University of New Hampshire
- Kaveh Shamsi
First Position: Tenure Track Assistant Professor at the University of Texas at Dallas
- Xiaolong Guo
First Position: Tenure Track Assistant Professor at the Kansas State University
- Fahim Rahman (co-advised by Dr. Mark Tehranipoor)
First Position: Research Assistant Professor at the University of Florida
- Travis Meade (co-advised by Dr. Shaojie Zhang)
First Position: Lecturer at the University of Central Florida
- Raj Gautam Dutta
First Position: Research Associate at the University of Florida

**PREVIOUS
MS STUDENTS**

- Ty Van Roy
- Venkata Sai Gireesh Chamarthi
- Miles Mulet
- Kelvin Ly (STERIS Instrument Management Services)
- Bo Hu
- Heather Lawrence (PhD student at Nebraska Applied Research Institute (NARI))

**PREVIOUS
SCHOLARS**

- Kejun Chen
- Tzung-Yu Tsai
- Yun-Yun Tsai
- Jiaji He

**PREVIOUS
UNDERGRAD**

- Marquez Jones (African American)
- John Carr
- Ty Van Roy
- Marshall Rawson
- Baker Herrin
- Jacob Crain
- John Woodman
- Jacqueline Gauthier
- Tyler J Sparks
- Claire Seiler
- Timon Angerhofer
- Fernando Guerra (Raytheon Technologies)
- Evan Richard (Florida Power and Light)
- Kyle Payne (Galatea Associates)
- Wesley Piard
- Christopher Crary
- Amon Harris (REU Site student)
- Jacob Hazelbaker
- Andrew Hughes
- Alexis Drayton
- Coleman Rogers
- Jacob Wurm (Raytheon SI)
- Khoa Hoang
- Orlando Arias (PhD student at the University of Central Florida)
- Kayshaunna Williams (REU Site Student)
- Bryan Pearson (REU Site Student)
- Nathalie Domingo (REU Site student)
- Thomas Louisville
- Andrew Mendoza
- Igor Prokopenko (Associate Information Security and Compliance Analyst at Publix Super Markets)
- Patrick Armengol (Graduate student at the Florida International University)
- Grant Hernandez (PhD student at the University of Florida)
- Dean Sullivan (PhD student at the University of Florida)
- Brandon Frazer (Associate electrical engineer at Mitsubishi Power Systems Americas)
- Ryan Dixon (Electrical engineer associate at Lockheed Martin)
- Victor Medina (Raytheon SI)
- Danny Aybar

- Ritika Oswal
- Roland Anderson
- Richard Klimek
- Jeff Biggers
- Henry Chan (Raytheon Technologies)

PREVIOUS HIGH SCHOOL TEACHERS

- Lauren Bracken (RET Teacher)
- James Ebbert (RET Teacher)
- Katherine Grady (RET Teacher)
- Jared Herretes (RET Teacher)
- Chad Hobby (RET Teacher)
- Junior Jn-Baptiste (RET Teacher)
- Kevin Scott (RET Teacher)
- Ronda Smucz (RET Teacher)
- Erika Trnka (RET Teacher)
- Jazmine Williams (RET Teacher)

INSTITUTIONAL SERVICE

- State University System of Florida (SUSF) Cybersecurity Advisory Council Apr 2019 - Present
Duty: Attending regular meetings to review the cybersecurity activities by Florida universities
- UF Department of Electrical and Computer Engineering (ECE) Graduate Recruiting and Admissions Committee (GRAC) 2019 - 2021 Duty: Attending regular discussions to suggest/decide the ECE graduate recruiting policies and routines
- UF Computer Engineering Area Computer-related Certificates Subcommittee Chair 2019 - 2021 Duty: Designing and developing graduate certificates in the area of Computer Engineering
- UF Semmoto Professor Search Committee Aug 2017 - Jan 2019 Duty: Serving in the endowed professor search committee and attending regular meetings to review/interview the candidates
- UF Undergraduate EE Curriculum Committee Jul 2017 - Jul 2020
Duty: Attending regular meetings to review Electrical Engineering undergraduate courses and curriculum
- UCF CpE Curriculum Oversight and Review Committee (CORC) May 2016 - Jun 2017 Duty: Attending regular meetings to review Computer Engineering undergraduate courses and curriculum
- UCF Cyber Cluster faculty search committee Sep 2015 - Jun 2017 Duty: Serving in the endowed professor search committee and attending regular meetings to review/interview the candidates
- UCF Computer Engineering faculty search committee Oct 2014 - Jun 2016
- UCF ECE representative on the cybersecurity task force committee Aug 2014 - Jun 2017
- Faculty Library Representative for the Electrical and Computer Engineering Division of the Department of Electrical Engineering and Computer Science, University of Central Florida 2013 - 2017
- PhD Thesis Committee
 - Sirui Luo (Advisor: Dr. Juin J. Liou)
 - Zhixin Wang (Advisor: Dr. Juin J. Liou)

- Jianling Yin (Advisor: Dr. Jun Wang)
- Yunfeng Xi (Advisor: Dr. Juin J. Liou)
- Jun Ding (Advisor: Dr. Nancy Hu)
- Ruijun Wang (Advisor: Dr. Jun Wang)
- Yu Bai (Advisor: Dr. Mingjie Lin)
- Adithya Prakash (Advisor: Dr. Kalpathy B. Sundaram)
- Wei Liang (Advisor: Dr. Juin J. Liou and Dr. Kalpathy B. Sundaram)
- Miao Meng (Advisor: Dr. Juin J. Liou and Dr. Kalpathy B. Sundaram)
- Shubhra Paul (Advisor: Dr. Swarup Bhunia)
- Shuo Yang (Advisor: Dr. Swarup Bhunia)
- Yongxin Liu (Advisor: Dr. Houbing Song)
- Shichao Yu (Advisor: Maire O'Neill)

PROFESSIONAL SERVICE *Associate Editor*

- IEEE Internet of Things Journal (IoT-J) (April 2020 - Present)
- ACM Design Automation of Electronic Systems (TODAES) (February 2019 - Present)
- IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD) (January 2018 - Present)
- Journal of Network and Information Security, Chinese (June 2017 - Present)
- Springer Journal of Hardware and System Security (HaSS) (June 2016 - Present)
- Integration, the VLSI Journal (June 2016 - Present)
- IET Cyber-Physical Systems: Theory & Applications (June 2016 - March 2020)
- IET Computers & Digital Techniques (March 2016 - May 2020)
- IEEE SMC Society Technical Committee on CCPS Newsletter (September 2015 - Present)

Guest Editor

- ACM Journal on Emerging Technologies in Computing. Special Issue on Trustworthy AI.
- Elsevier Journal of Computer Networks. Special Issue on Security and Privacy for the Internet of Things.
- Springer Journal of Hardware and Systems Security. Special Issue on Secure and Trustworthy Computing Devices in the IoT Regime.
- IEEE Transactions on Multi-Scale Computing Systems. Special Issue/Section on Hardware/Software Cross-Layer Technologies for Trustworthy and Secure Computing.
- VLSI, The Journal of Integration. Special Issue on ASP-DAC 2019.

Proposal Panelist/Reviewer

- National Science Foundation (NSF), 2018, 2019, 2020, 2021
- Research Grants Council (RGC) of Hong Kong, 2021, 2022
- Department of Energy (DoE), 2016, 2017, 2018, 2019, 2020, 2021
- European Research Council (ERC), 2020
- Department of Energy (DoE), Small Business Innovation Research (SBIR), 2016, 2018, 2019
- The Croatian Science Foundation (HRZZ), 2018
- Natural Sciences and Engineering Research Council of Canada (NSERC), 2018

- Netherlands Organisation for Scientific Research (NWO), 2018
- Deutsche Forschungsgemeinschaft (German Research Foundation), 2016
- Foundation for Polish Science (FNP), 2016
- Florida Center of Cybersecurity (FC2) review panel, 2015, 2016
- CHIST-ERA review panel, 2016
- Ontario Research Fund - Research Excellence (ORF-RE), 2016

Conference/Workshop (Co-)Founder

- IEEE Asian Hardware Oriented Security and Trust Symposium (AsianHOST)
- Internet of Things (IoT) and Automotive Security Workshop (IASW '17) affiliated to the IEEE International Symposium on Hardware Oriented Security and Trust (HOST '17)

Conference/Workshop (Co-)Chair

- IEEE International Conference on Embedded Software and Systems (ICCESS '20, '21)
- IEEE International Workshop on Design Automation for Cyber-Physical Systems (CPSDA), 2016, 2017, 2018, 2019, 2020
- IEEE Cyber Science and Technology Congress (CyberSciTech '18, 19)
- Design Automation Summer School (DASS '16, '17, '18)
- International IEEE Verification and Security Workshop (IVSW '18)
- Asian Hardware Oriented Security and Trust Symposium (AsianHOST '16, '17, '18)
- Internet of Things (IoT) and Automotive Security Workshop (IASW '17), affiliated to the IEEE International Symposium on Hardware Oriented Security and Trust (HOST '17)
- Cyber-Physical Systems Security & Privacy Workshop (CPSSP '17), affiliated to the IEEE International Conference on Data Science in Cyberspace (IEEE DSC '17)
- SIGDA/DAC International Hardware Design Contest 2017
- IEEE International Conference on Dependable, Autonomic and Secure Computing (DASC 2017)
- The First Florida Security Workshop, 2016
- IEEE INFOCOM Workshop on Cross-Layer Cyber-Physical Systems Security (CPSS), 2016

Organizing Committee

- Asia and South Pacific Design Automation Conference (ASP-DAC '17, '18, '21, '22)
- Asian Hardware Oriented Security and Trust Symposium (AsianHOST '19, '20, '21)
- IEEE International Symposium on Hardware-Oriented Security and Trust (HOST '15, '16, '17, '18, '19, '20)
- IEEE International Conference on Embedded Software and Systems (ICCESS '19)
- IEEE Computer Society Annual Symposium on VLSI (ISVLSI '19)
- IFIP Internet of Things (IoT) conference (IFIP IoT '19)
- IEEE International Conference on Consumer Electronics (ICCE '18, '19)
- IEEE International Conference on Computer Design (ICCD '17, '18)
- ICCAD Workshop on Design Automation for Analog and Mixed-Signal (AMS) Circuits 2017
- IEEE International Midwest Symposium on Circuits and Systems (MWSCAS '17)

- Security B-Sides Orlando, 2015, 2016.
- Asia Workshop on Smart Sensor System (AWSSS '16)
- International Symposium on VLSI Design and Test (VDATE '14)

Best Paper Selection Committee

- HOST Best Paper Selection Committee, 2020
- SIGDA Outstanding PhD Dissertation Award (OPDA) Committee, 2019
- ICCAD Best Paper Selection Committee, 2018, 2019

Conference Special Committee

- Design Automation Conference (DAC) Special Focus Committee in Security Area, 2020

Technical Program Committee

- International Test Conference (ITC '15, '16, '17, '18, '19, '21, '22)
- AAAI Conference on Artificial Intelligence (AAAI '21, '22)
- ICPADS'21
- USENIX Security (USENIX '22)
- Network and Distributed System Security Symposium (NDSS '16, '21, '22)
- IFIP Internet of Things (IFIP IoT '20, '21)
- ACM Conference on Computer and Communications Security (CCS '17, '18, '19, '21)
- SIGDA PhD Forum at DAC 2016, 2017, 2018, 2019, 2020
- International Conference on Neuromorphic Systems (ICONS '19, '20)
- ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec '18, '19, '20)
- Workshop on the Internet of Things Security and Privacy (IoT S&P '19)
- IEEE/ACM International Conference on Computer-Aided Design (ICCAD '17, '18, '19)
- The International Workshop on Security in Cloud Computing (AsiaCCS-SCC '17, '19)
- The International Symposium on Privacy Computing (PriCom '19)
- IEEE Computer Society Annual Symposium on VLSI (ISVLSI '14, '15, '16, '17, '18, '19)
- Attack and Solutions in Hardware Security Co-located with ACM CCS (ASHES '17, '18, '19)
- Great Lake Symposium on VLSI (GLSVLSI '16, '17, '18, '19)
- The IEEE International Conference on Distributed Computing Systems (ICDCS '19)
- The International Symposium on Quality Electronic Design (ISQED '17, '18, '19)
- IFIP/IEEE International Conference on Very Large Scale Integration (VLSI-SoC '15, '16, '18)
- International Symposium on Cyberspace Safety and Security (CSS '18)
- IEEE International System-on-Chip Conference (SOCC '15, '16, '17, '18)
- International Conference on Science of Cyber Security (SciSec '18)
- EAI International Conference on Security and Privacy in Communication Networks (SecureComm '16, '17, '18)
- The International Test Conference in Asia (ITC-Asia '17, '18)

- The 27th International Conference on Computer Communication and Networks (ICCCN '18)
- ACM Student Research Competition at ICCAD (SRC@ICCAD '16, '17)
- The 30th International Conference on VLSI Design and 16th International Conference on Embedded Systems (VLSID '17, '18)
- IEEE International Symposium on Nanoelectronic and Information Systems (iNIS '15, '16, '17)
- Smart Card Research and Advanced Application Conference (CARDIS '17)
- Hardware and Architectural support for Security and Privacy workshop (HASP '17)
- The 1st International Workshop on Energy-Aware Computing and Communication (ECC) for Networked Cyber-Physical Systems (NCPS) '17
- International Workshop on Assured Cloud Computing and QoS Aware Big Data (WACC '17)
- ACM Asia Conference on Computer and Communications Security (ASIACCS '17)
- IEEE International Workshop on Information Forensics and Security (WIFS '16)
- International Conference on Communication and Network Security (ICCNS '16)
- International Verification and Security Workshop (IVSW '16)
- International Symposium for Testing and Failure Analysis (ISTFA '16)
- IEEE International Conference on Computer Design (ICCD '12, '15, '16)
- 37th IEEE Real-Time Systems Symposium (RTSS '16)
- 14th International Conference on Applied Cryptography and Network Security (ACNS '16)
- Design Automation Conference (DAC '15, '16)
- The 28th Conference on VLSI Design and the 15th Conference on Embedded Systems (VLSI Design '16)
- Asia and South Pacific Design Automation Conference (ASP-DAC '16)
- The 13th International Conference on Information Technology (ICIT '14)
- The 23rd Asian Test Symposium (ATS '14)
- IEEE International Symposium on Hardware Oriented Security and Trust (HOST '14)
- IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT '12)