

Asian Hardware Oriented Security and Trust Symposium

December 14-16, 2022, Singapore (Hybrid)



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PhD Forum Call for Participations

The Asian Hardware Oriented Security and Trust Symposium (AsianHOST) 2022 is seeking for submissions to PhD Forum, which will be selected for presentation in the PhD Forum session of the symposium. The AsianHOST 2022 PhD Forum will provide a platform for student researchers to showcase their research results and experiences. The presenter must be a PhD/Master student at the time of submission. This is a great opportunity for students to communicate research results, gain constructive feedbacks, practice presentation skills, and build a professional network.

Topics for AsianHOST 2022 PhD Forum:

We invite **1-page submissions** in all areas related to Hardware Oriented Security and Trust, including but not limited to the following topics:

- Hardware-intrinsic security primitives (e.g., PUF and TRNG)
- Architectural and microarchitectural attacks and defences
- Secure system-on-chip (SoC) architecture
- Trusted platform modules and hardware virtualization
- Side-channel attacks and countermeasures
- Hardware Trojan attacks and detection techniques
- Security analysis and protection of Internet of Things (IoT)
- Hardware IP core protection and trust for consumer electronics systems and IoT
- Security and trust of machine learning and artificial intelligence
- Automobile, self-drive and autonomous vehicle security
- 5G and physical layer security
- Hardware-assisted cross-layer security
- Cyber-physical system (CPS) security and resilience
- Metrics, policies, and standards related to hardware security
- Security verification at IP, IC, and system levels
- Reverse engineering and hardware obfuscation
- Supply chain risks mitigation including counterfeit detection & avoidance
- Trusted manufacturing including split manufacturing, 2.5D, and 3D ICs
- Emerging nanoscale technologies in hardware security applications

Important Information for PhD Forum Submissions

Submissions of PhD Forum do not need to describe complete work, but they should report preliminary results so that useful feedback on the ongoing work can be obtained from experts and colleagues in hardware security and trust research.

- 1) Each selected student abstract will be assigned a slot for swift focused presentation of research objectives and early results.
- 2) Accepted PhD Forum submissions will be posted on the AsianHOST website but will not be published in IEEE Xplore. **High-quality proposals will be invited to prepare an extended journal paper for submission to IEEE Transactions on Circuits and Systems I: Regular Papers (TCAS-I) Special Issue "Emerging Hardware Security and Trust Technology".**

We recommend that a proposal has the format of a 1-page submission (title, author information, 500-word abstract and brief summary of contribution) and it should be submitted in PDF format to the symposium [submission website](#). The PhD Forum committee will review the submission and recommend selected proposals for presentation at the symposium.

PhD Forum Presentation Award

The PhD Forum committee will select one proposal for the PhD Forum Presentation Award. The selection of this award will be made on the basis of the quality of the 1-page proposal and the participant's oral presentation.

Important Dates:

Submission Deadline: **November 14, 2022, 23:59:59 CST**

Notification of Acceptance: **November 21, 2022**

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