HOST 2023 PhD Dissertation Competition

IEEE International Symposium on Hardware Oriented Security and Trust (HOST) invites the soon-to-be graduated Ph.D. students (and recent graduates) to participate in the competitive PhD Dissertation Contest. The aim is selecting the dissertations that are advancing the state-of-the-art research in the field of hardware-oriented security and trust. The objective is to simply evaluate the quality of the research carried out during the PhD program.

Area of Research

- **Hardware Security Primitives**
  - e.g., PUFs, TRNGs, cryptography, post-quantum cryptography, odometers.
- **Computer-aided Design (CAD) for Hardware Security Verification**
  - e.g., automatic techniques and metrics for life cycle security management and detecting security vulnerabilities.
- **Hardware Attack and Defense**
  - e.g., hardware Trojans, fault injection, side-channels, hardware reverse engineering, hardware obfuscation.
- **Architecture Security**
  - e.g., architectural side-channels, trusted execution environment, FPGA and reconfigurable fabric security.
- **System Security**
  - e.g., machine learning security, SoC/IP security, CPS/IoT security, sensor network security, smart grid security, cloud security.
- **Emerging or Other Topics**
  - e.g., privacy-enhancing architecture, cryptocurrency security, and other hardware/system security topics.

Eligibility

Those who will defend their PhD dissertation no later than May 1, 2024 as well as all Ph.D. alumni who graduated after April 30, 2022 are eligible to participate in the competition.

Competition Process

To ensure the fairness of the process, the competition will follow a **blind review** process. The first step is submitting a two-page pdf file that includes a cover letter (one page) and an extended abstract (one page) whose review would be double blind. Then the selected contestants will give a short presentation at HOST 2023 without pointing to their names, their advisor(s), school, and publications. The winner will be selected right after the competition and will be announced during the reception event.

Submission

The participants must submit a 1-page cover letter and a 1-page extended abstract of their Ph.D. thesis (including Figures and Tables). Please only submit one pdf file including both the cover letter and the extended abstract. The submission should **not** include the name of the participant, the advisor(s), or the school.

The cover letter should answer the following questions:
1. When will/did you graduate?
2. How many papers did you publish totally on your thesis topic?
3. Please mention ONLY the venues of your publications (for blind review: **without** mentioning the publication year, paper title, and author list).
4. In which of the publications you mentioned in the answer to Question 3, you were the first author?

The abstract should include problem statements, objectives, novelty, and the approach. Please make sure to explain contributions of your work including why the work is unique and how it advances the state of the art. No references are allowed to follow a **blind review** process.

Important Dates
February 10, 2023: Deadline for application
March 15, 2023: Notification of acceptance
Submission Site: https://easychair.org/conferences/?conf=host2023 (Please make a new submission and choose the **HOST 2023 PhD Dissertation Competition** track)

Contact Information
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