

## HOST 2022 Call for Hardware Demos

**IEEE International Symposium on Hardware Oriented Security and Trust (HOST)** will include a special session which allows students and faculty to present tech-transfer based research through a hands-on hardware demonstration. A set of booths configured with tables and easels will be provided to allow students to set up laptops and hardware configurations, such as FPGAs, RFID readers, power supplies, etc. The details regarding the judging process will be sent out after each demo proposal notification of acceptance/denial has been given. Participants are required to assemble and display a poster which summarizes and illustrates concepts as well as provides extensive results beyond what is possible to reproduce on-site.

### Demonstration Areas

The focus area of the hardware demonstration must be related to hardware-level security and trust, which includes a broad range of topics many of which are listed in the HOST call-for-papers.

### Guidelines

- The submission deadline for the hardware demonstration proposal is **February 7, 2022**. The results will be announced on **February 22, 2022**. The HOST website should be consulted for any changes in the proposal deadline.
- **Demos already accepted for HOST 2021 do not need to be re-submitted.**
- Proposals are limited to two pages in length and must be submitted through EasyChair (<https://easychair.org/conferences/?conf=ieeehost2022>). Hardware demonstration chairs **Adam Kimura** ([kimura@battelle.org](mailto:kimura@battelle.org)) and **Wenjie Che** ([wche@nmsu.edu](mailto:wche@nmsu.edu)) should be contacted for questions.
- Proposals should include a 1/2 to 1 page description of the research, with references provided to previously published papers (if available).
- The remainder of the proposal should describe the nature of the demonstration and present content such as but not limited to: graphics showing the experimental setup and required equipment, the specific features of the research that will be targeted in the hardware demo, a description of the observables, and what the audience would expect to see.
- The main components of the proposal must be included as components of the poster that will accompany the hardware demo.
- Proposals will be evaluated and selected based on the novelty of proposed research and demonstration as well as the clarity and completeness of the description, including figures that depict the hardware prototype and other design representations that are appropriate to the core contribution.
- A set of judges will evaluate the hardware demonstrations. Details regarding the judging process will be sent out before the conference to participants who are selected for hardware demos. The top three demos will be selected for awards and announced at HOST. The judging time interval will be announced in an email prior to the HOST meeting.

### Scholarship Opportunity

Students associated with hardware demonstrations which are selected for HOST 2022 will have the opportunity to apply for a travel scholarship to reimburse hotel costs.

### Student Hardware Demonstration Contest

A committee of judges will evaluate each hardware demonstration at HOST. The top three student demonstrations will be given an award. The criteria used by the judges to evaluate the demonstrations will be based on the following:

- How effective was the observable? (e.g., was there a graphical user interface that reflected aspects of the actual hardware working? Were there indicators that clearly reflected operations being performed in the hardware?)
- Was the hardware demo well organized and the concepts presented clearly? (e.g., was there background information being properly provided/introduced? Were the uniqueness/contributions of the demo well-articulated?)
- How well did the students answer questions? (e.g., did the student appear to be knowledgeable about the hardware security area that the demo was tied to? Were the student aware of the limits and were able to reasonably justify?)
- Complexity/difficulty of the demo: How challenging is the demo being set up and performed?
- Overall score: What was the overall impression?

### Important Dates

**February 7, 2022:** Deadline for hardware demo proposals

**February 22, 2022:** Notification of acceptance

**Submission Site:** <https://easychair.org/conferences/?conf=ieeehost2022> (Please make a new submission and choose the "HOST Hardware Demo" track)

### Contact Information

**HOST Hardware Demo Co-Chairs: Adam Kimura and Wenjie Che**

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