

Call for Papers

11th Annual **HOT TOPICS** in the **SCIENCE OF SECURITY (HoTSoS)**

April 2-4 2024 | virtually hosted by THE NATIONAL SECURITY AGENCY

<http://hotsos.org>



Overview

Hot Topics in the Science of Security (HoTSoS) is a forum for presenting and discussing the latest research and development advances in the scientific foundations of cyber security and privacy. In the pursuit of mentorship and advancement of knowledge, the forum brings together researchers, practitioners, and thought leaders from government, industry, and academia. The National Security Agency (NSA) sponsorship of HoTSoS provides for a collaborative relationship with NSA researchers, practitioners, and leaders and results in a unique attendee audience. The HoTSoS vision is to engage and grow a community that includes researchers and skilled practitioners from diverse disciplines focused on the advancement of scientific methods. The event provides networking and mentoring opportunities to advance the scientific research careers of students. **HoTSoS' 24** will continue to pioneer new methods to have impactful **virtual**

events in April 2024. In addition to research paper discussions and presentations, the symposium program will also include invited talks, panels, and posters. **We solicit submissions in the following three categories:**

- 1. Already published research papers** will be accepted for presentation, provided their scope aligns with HoTSoS.
- 2. Works-in-Progress papers (WiP)** will be evaluated for scope, potential for impact, and technical merit. Papers in this category will be discussed during the special WiP session and receive detailed feedback towards making the paper publishable at a top-tier venue. We are looking for bold, risky, and interdisciplinary ideas.
- 3. Poster/Demo** abstracts will be selected for brief presentations and highlighted by a poster/demo competition.

Submission Requirements

All papers and manuscripts should be submitted via EasyChair: <https://easychair.org/conferences/?conf=hotsos24>

Already Published Research Papers

When submitting, specify the submission category to be "already published research papers". Submissions may use the format of the published venue.

Works-in-Progress Papers

When submitting, specify the submission category to be "Works-in-Progress papers." WiP papers should be at most 10 pages in the double-column ACM format including the bibliography or, alternatively, 9 pages not including the bibliography. Note that WiP papers are encouraged even if they are substantially shorter than the page limit. The paper may have optional appendices, but reviewers are not required to read them. Submissions must be in PDF format and the title should begin with "WiP: ."

Each author must assert that the manuscript is unpublished and revisions can be incorporated into the manuscript prior to their next submission for publication. Prior publication includes the appearance in a proceeding, online or in print, of any version of the work that received peer review, including short papers. Posters and online, pre-submission non-archival versions of non-peer reviewed papers will not be considered prior publication. Pre-submission non-archives include arXive.org and CiteSeerX. A short paper version of a submission may not immediately disqualify the submission, however, and the committee will consider the differences in the versions prior to making final decisions. Thus, authors are encouraged to briefly disclose in a cover page to their submission any prior submissions and/or publications related to the submission.

ACM Template: <https://www.overleaf.com/gallery/tagged/acm-official#WlayAktG3v0>

Poster/Demo Abstract Submissions

When submitting, specify the submission category to be "poster or demo presentation." Accepted posters/demos will be displayed on the symposium website. Each extended abstract should be at most 2 pages, including citations and references.

Government and Industry Talks

Nominations or proposals for government or industry talks can be sent directly to the program chairs via email at hotsos2024@cps-vo.org.

Topics of Interest

- Applications of AI in cybersecurity and autonomous systems
- Application of Psychology to Enhance Cybersecurity
- Design principles, tools, and architectures for provably secure systems
- Ethical considerations of AI in security and privacy
- Resiliency and operating in degraded/compromised environments
- Scalable and composable frameworks for security
- Security and Cybersecurity Applications of Large Language Models
- Security of cyber-physical, service mesh networks and autonomous systems
- Security metrics, measurements and attestation
- Security policies, validation, reasoning and enforcement
- Threat modeling and analysis techniques and tools
- Trustworthy AI, theoretical limits, and explainability
- Zero Trust Frameworks in support of 5G/FutureG

Important Dates

Submission Deadline:	December 15, 2023 AOE
Acceptance Decisions:	February 14, 2024
Virtual Symposium:	April 2-4, 2024

Please send any questions about topics or submission requirements to hotsos2024@cps-vo.org

Organization

General Chair

- Adam Tagert (National Security Agency)

Program Co-Chairs

- Alexander Velazquez
(U.S. Naval Research Laboratory's Center for High Assurance Computer Systems)

- Adam Petz (University of Kansas)

