Call for Participation: Learning from Authoritative Security Experiment Results (LASER) 2023

The Learning from Authoritative Security Experiment Results (LASER) Workshop will be held on Tuesday, December 5, 2023, in conjunction with the Annual Computer Security Applications Conference (ACSAC).

The <u>LASER workshop series</u> focuses on learning from and improving cybersecurity experiment results. The workshop strives to provide a highly interactive, collegial environment for discussing and learning from experimental methodologies, execution, and results. Ultimately, the workshop seeks to foster a dramatic change in the experimental paradigm for cybersecurity research, improving the overall quality and reporting of practiced science.

The LASER workshop invites broad participation by the community, including (1) authors of accepted papers from major cybersecurity conferences to present and discuss the experimental aspects of their work, and (2) by others interested in contributing to and learning from such discussions and interaction.

Conference papers all too often must focus on research results and contain limited discussion of the experimental aspects of the work (maybe a small section with a few paragraphs at the end of the paper). LASER provides an opportunity to focus on and explore the experimental approaches and methodologies used to obtain the research results.

The LASER workshop not only provides authors of accepted papers the opportunity to present and discuss the experimental aspects of their work with other workshop participants, but also the option to write new published papers that expand on the experimental aspects of their work.

Workshop Format

The workshop will be structured as a true "workshop" in the sense that it will focus on discussion and interaction around the topic of experimental methodologies, execution, and results with the goal of encouraging improvements in experimental science in cybersecurity research. Authors will lead the group in a discussion of the experimental aspects of their work.

Specific areas of interest to LASER include, but are not limited to, the following:

- Research questions and/or hypotheses
- Experimental methodologies used and/or developed
- Experiment design
- Use of simulation, emulation, virtualization, and/or physical testbeds
- Use of specialized hardware including CPS and IoT devices
- Modeling of human-behavior characteristics
- Software tools used and/or developed to perform experimentation
- Approaches to experiment validation, monitoring, and data collection
- Datasets used and/or developed to perform experimentation
- Measurements and metrics
- Analytical techniques used and/or developed to evaluate experimental results

As a group, authors and other participants will discuss these areas and answer interesting questions such as:

- Did you use experimentation artifacts borrowed from the community?
- Did you attempt to replicate or reproduce results of earlier research as part of your work?
- What can be learned from your methodology and your experience using your methodology?
- What did you try that did not succeed before getting to the results you presented?
- Did you produce any intermediate results including possible unsuccessful tests or experiments?

Presentations are expected to be interactive with a substantial amount of time devoted to questions and discussion.

Workshop Papers

Participants in the LASER Workshop will be strongly encouraged to write new papers on their experimental work. The papers will be published in post-workshop proceedings. The new papers will be driven and guided, in part, by the discussions and interactions, and possibly even new collaborations, forged at the workshop.

Draft papers will be due approximately two months after the workshop. A set of external reviewers will review papers and provide feedback one month after submission. Final camera-ready papers will be due approximately one month later.

Important Dates

LASER Workshop @ ACSAC: December 5, 2023
Draft Papers Submitted: February 5, 2024
Paper Reviews and Feedback: March 5, 2024
Final Papers Submitted: April 5, 2024
Papers Published: May 5, 2024

Organizers

David Balenson (USC Information Sciences Institute) Laura S. Tinnel (SRI International)

Further Information

Please see <u>www.laser-workshop.org</u> for more information about the LASER Workshop. Send questions to <u>info@laser-workshop.org</u>.