Call for Participation: Learning from Authoritative Security Experiment Results (LASER) 2020

The LASER workshop series (www.laser-workshop.org) 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.

Each year, the LASER committee chooses a slightly different focus and approach to help the community reach the overall goals of the effort. Past LASER workshops have focused on experimental issues, such as:

- Learning from and reporting of unsuccessful or unanticipated results, leading to a reduction in the repetition of past failures,
- Adequate reporting of experiments, leading to an ability to understand the approach taken and reproduce results, and
- Solid experiment methodologies and execution, leading to reliable, conclusive results.

This year, the LASER workshop invites participation by authors of accepted NDSS papers to come together to explore and discuss the experimental aspects of their work. 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 will provide authors the opportunity to focus on the experimental approaches and methodologies used to obtain their results. Specific areas of interest include, but are not limited to, the following:

- Approaches to study design, including hypotheses and research questions
- Experimental methodologies used and/or developed
- Experiment design and instantiation techniques
- Use of simulation, emulation, virtualization, and/or physical testbeds
- Use of general-purpose experimentation infrastructure, such as Emulab and DETER
- Integration 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
- Analytical techniques used and/or developed to evaluate experimental results
- Development and use of measurements, metrics, and use cases
- Attempts to replicate or reproduce results of earlier research as part of your work
- Intermediate results including possible unsuccessful tests or experiments
- Experimentation artifacts borrowed from and/or shared with the community

Authors should address all the relevant aspects of their experimental approaches and methodologies.

The goal is to gather a group of authors from 6-8 papers to engage in a discussion of their experimental methodologies. As a group, participants will explore and answer interesting questions such as: “How did you get the results?”, “What can be learned from your methodology?”, and “What did you try that did not succeed before getting to the results you presented?”.

The LASER committee is not calling for papers at this time. Presentations of work will be by invitation, based on paper submissions to NDSS. LASER will provide authors the opportunity to focus on the experimental aspects of their work, discuss and interact with other workshop participants, and write new published papers that more fully cover the experimental aspects of their work. We invite open participation by others interested in being part of and learning from such discussions. To participate, simply register for the workshop.

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 should be prepared to lead the group in a discussion of the experimental aspects of their work. Presentations are expected to be interactive with a substantial amount of time devoted to questions and discussion and should be structured accordingly. To promote a high level of interaction, attendance is limited. First preference is given to participating authors. Additional seats are available on a first-come first-served basis.

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. The program committee will review papers and provide notifications and feedback one month after submission. Final camera-ready papers will be due approximately one month later.

Important Dates

LASER Workshop @ NDSS:	February 23, 2020
Draft Papers Submitted:	April 23, 2020
Notifications and feedback:	May 23, 2020
Final Papers Submitted:	June 23, 2020
Papers Published:	July 23, 2020

Program Committee

Dr. Jim Alves-Foss (University of Idaho), Program Chair
The program committee is currently being formed. More information will be forthcoming.

Organizers

Terry Benzel (USC-ISI), General Chair
David Balenson (SRI International), Funding/Local Arrangements/Scholarships
Laura S. Tinnel (SRI International), Publicity/Web/IT Services

Further Information

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