ASE '17: 2017 USENIX Workshop on Advances in Security Education

August 15, 2017 • Vancouver, BC, Canada

Sponsored by USENIX, the Advanced Computing Systems Association

ASE '17 will be co-located with the 26th USENIX Security Symposium (USENIX Security '17) and take place August 15, 2017.

Important Dates

- Paper submissions due (full and short papers): Tuesday, May 9, 2017, 8:59 pm PDT (no extensions)
- Notification to paper authors: **Thursday, June 8, 2017**
- Lightning Talk abstracts due: **Wednesday, June 28, 2017**
- Notification about Lightning Talks: **Wednesday, July 5, 2017**
- Final paper files due: **Thursday, July 6, 2017**

Workshop Organizers

Program Co-Chairs

Mark Gondree, *Sonoma State University*
Ashley Podhradsky, *Dakota State University*

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Overview

The 2017 USENIX Workshop on Advances in Security Education (ASE '17) is co-located with the 26th USENIX Security Symposium and is intended to be a venue for cutting-edge research, best practices, and experimental curricula in computer security education.

The workshop welcomes a broad range of paper submissions on the subject of computer security education in any setting (K-12, undergraduate, graduate, non-traditional students, professional development, and the general public) with a diversity of goals, including developing or maturing specific knowledge, skills and abilities (KSAs), or improving awareness of issues in the cyber domain (e.g., cyber literacy, online citizenship). ASE is intended to be a venue for educators, designers, and evaluators to collaborate, share knowledge, improve existing practices, critically review state of the art, and validate or refute widely held beliefs.

ASE is the evolution of the USENIX Summit on Gaming, Games, and Gamification (3GSE), expanded to welcome a wider range of contributions to security education research. The broad workshop scope is intended to attract those already working in this space within the traditional USENIX Security community, as well as those from other communities, including education researchers, social scientists, and practitioners. The workshop attempts to represent, through invited talks, paper presentations, panels, and tutorials, a variety of approaches and issues related to security education.

Format

ASE is intended to be a venue for informal collaboration and community-building. The current program includes:

- A keynote address
- Sessions for full papers; authors accompany these with presentations at the workshop, with time for follow-up discussion
- Sessions for short papers; authors accompany these with "live lessons" at the workshop, demonstrating a successful or innovative lesson, activity, exercise, or tool

- A session for Lightning Talks and community announcements
- A panel discussion exploring popular and/or controversial issues in security education

All sessions are intended to stimulate group discussion and impact future work. We encourage attendees to participate in Lightning Talks, where they can bring attention to new results, distribute materials, or make announcements of interest to the education community (new events, projects, funding opportunities, venues, etc.).

Topics

The core mission of ASE is to disseminate cutting-edge, practitioner-oriented, computer security education research. Specific topics of interest include, but are not limited to:

- Novel pedagogical approaches and experimental curricula
- Outreach and mentorship of groups underrepresented in security
- Education technology research in a security education context
- Tools and techniques for measurement, evaluation, and assessment
- Frameworks and infrastructures supporting education
- Experiences with standards, certifications, and accreditation
- Security games and competitions
- Extramural and extracurricular education programs
- Experience with alternative teaching modalities for computer security, including MOOCs, flipped classrooms, peer-instruction and inquiry-based instruction, and distance learning
- Security education geared toward non-technical audiences

Full Papers

Full paper submissions should be no more than eight pages long (excluding references). Full papers are expected to follow style and format of a traditional academic format, featuring an abstract, introduction, related work, conclusion and references. As a workshop paper, these may highlight early work, in-progress work, lessons-learned, position papers, or program summaries; however, full papers are intended do at least one of the following: highlight some technical solution of merit to the education community, feature some analysis or survey work of value to the education community, or employ some assessment based on community-accepted practices for the scholarship of teaching and learning.

Each full paper will be accompanied by a presentation delivered at the workshop by one of the paper's authors (approximately 15–20 minutes in duration).

Short Papers

We are excited to provide educators with a venue to share an exercise, problem set, activity or tool with the workshop. Short papers supplement these presentations and may take the form of extended abstracts, stand-alone lesson plans (e.g., featuring learning objectives and related materials to help educators reproduce the lesson) or technical descriptions to accompany a demo.

Short paper submissions should be between 2–6 pages, but no more than 6 pages long (including references). At a minimum, short papers should feature an abstract, introduction, and references, and the paper's introduction should contain a summary of what the "live lesson" at the workshop will demonstrate. Beyond this, short papers should choose a form that complements their topic. For example, an in-class activity might provide a lesson plan, learning objectives, activity description, sample follow-on activities; a software demo might include a description of its capabilities and a short case study of its prior use. When appropriate, the paper is encouraged to reference external, supplemental, and/or multimedia resources. Short papers for lessons, in particular, may consider paralleling the format of SIGCSE Nifty presentations (http://nifty.stanford.edu/), i.e., letting ASE host all assignment materials and using the short paper as a brief summary/commentary on those. All supplemental materials should be submitted with the paper or otherwise be accessible to reviewers at the time of submission and throughout the review period.

Each short paper will be accompanied by a "live lesson" delivered at the workshop by one of the paper's authors (approximately 15–20 minutes in duration), but extra time may be afforded during breaks or after sessions for continued exploration. Potential "live lessons" include scaffolded exercises, abbreviated lessons, tool demonstrations, or classroom activities (engaging the workshop audience, either as students or fellow practitioners). They may include a short video of a classroom practice, a live demo of an instructional technique, an interactive exercise with the workshop attendees, a technology demonstration, etc.

Lightning Talks

Lightning Talks highlight fresh ideas, unique perspectives, valuable experiences, and emerging trends in computer security education. Short talks are five-minute presentations on work and ideas not ready or suitable for peer-reviewed publication but worth sharing to jump-start discussion among and solicit feedback from attendees.

Short talk presentations are five minutes in duration with an additional five minutes for discussion. If you would like to present a short talk at the event, please email a talk abstract to ase17talks@usenix.org. There are no length or content requirements for the short talk abstract, but a few sentences describing what you'd like to do or announce, informally, is appropriate.

Paper Submissions

Full paper submissions must be no more than eight pages long, excluding references. Short paper submissions should be no more than six pages long, including references.

For all submissions, text should be formatted in two columns on 8.5" x 11" paper using 10-point type on 12-point leading ("single-spaced"), with the text block being no more than 6.5" x 9" deep. Text outside the 6.5" x 9" block will be ignored. Submissions need not be anonymized. Submissions must be in PDF and must be submitted via the Web submission form on the ASE '17 Web site, www.usenix.org/ase17/cfp.

All accepted papers will be available online to registered attendees before the workshop. If your paper should not be published prior to the event, please notify production@usenix.org. The papers will be available online to everyone beginning on the day of the workshop. At least one author from every accepted paper must attend the workshop and present.

Simultaneous submission of the same work to multiple venues, submission of previously published work, or plagiarism constitutes dishonesty or fraud. USENIX, like other scientific and technical conferences and journals, prohibits these practices and may take action against authors who have committed them. See the USENIX Conference Submissions Policy at www.usenix.org/conferences/submissions-policy for details. Questions? Contact your program co-chairs, ase17chairs@usenix.org, or the USENIX office, submissionspolicy@usenix.org.

Papers accompanied by nondisclosure agreement forms will not be considered. Accepted submissions will be treated as confidential prior to publication on the USENIX ASE '17 Web site; rejected submissions will be permanently treated as confidential.