

The 51st ACM Technical Symposium on Computer Science Education

March 11-14, 2020, Portland, OR, USA, <https://sigcse2020.sigcse.org>

The SIGCSE Technical Symposium is a forum for educators and researchers to share new results and insights around developing, implementing, or evaluating computing programs, pedagogy, curricula, and courses. With the 51st SIGCSE Technical Symposium, we are laying the ground work for the next 50 years of computing education. We welcome submissions on the topics of broadening participation and diversity, K-12 and novice learners, improved and scalable pedagogies, leveraging data and analytics to improve learning, peer learning and instruction, novel outreach, events and engagement strategies, involving students in solving social and global challenges, advanced CS topics, and education research – including qualitative and quantitative, instruments, null, and negative results. SIGCSE Technical Symposium encourages many ways to share ideas, including papers, panels, special sessions, workshops, the ACM Student Research Competition, Birds of a Feather (BoFs), demos, lightning talks, nifty assignments, posters, and pre-symposium events. We invite colleagues to contribute to, review for, and attend SIGCSE 2020. *The official publication date is the date the proceedings are made available in the ACM Digital Library. This date may be up to two weeks prior to the first day of the conference. The official publication date affects the deadline for any patent filings related to published work.*

PAPERS (6 pp. max + 1 pp. for references; 25 min. presentation) Papers describe an educational research project, classroom experience, teaching technique, curricular initiative, or pedagogical tool. All papers should explicitly state their motivating questions, relate to relevant literature, and contain an analysis of the effectiveness of the interventions, including limitations. Initial submissions must be anonymous. **Note that an ABSTRACT SUBMISSION is required for all papers one week before the full paper is due.**

- **CS Education Research** papers should adhere to rigorous standards, describing research questions, methods, results, and limitations. These normally focus on topics relevant to computing education with emphasis on educational goals and knowledge units/topics relevant to computing education; methods or techniques in computing education; evaluation of pedagogical approaches; and studies of the many populations engaged in computing education, including (but not limited to) students, instructors, and issues of gender, diversity, and underrepresentation.
- **Experience Reports and Tools** papers should carefully describe a computer science education intervention, its context, and provide a rich reflection on what did or didn't work, and why. This track accepts experience reports, teaching techniques, and pedagogical tools. All papers in this track should provide enough detail for adoption by others.
- **Curricula Initiative** papers discuss new and revised curricula, programs, degrees and also include position papers. Papers about curricula, programs and degrees should describe the motivating context before the new initiative was undertaken, what it took to put the initiative into place, the impact, and suggestions for others wishing to adopt it. Position papers should engender fruitful academic discussion through a defensible opinion about a CS education topic, substantiated with evidence.

PANELS (2 pp. max; 75 min.) Panels present multiple perspectives on a specific topic. Panel proposals include a topic description, panelists, affiliations, panelist position statements, and a plan for audience participation. An abstract is included in the proceedings.

SPECIAL SESSIONS (2 pp. max; 75 min.) Special sessions are your opportunity to design a unique 75-minute session in a standard conference space, but distinct from papers, panels, posters, or BoFs. An abstract is included in the proceedings.

WORKSHOPS (2 pp. max; 3 hours) Workshops engage participants in learning new techniques and technologies designed to foster education, scholarship, and collaboration. Proposals must include an abstract, intended audience and size, and specify power/A/V/equipment/space needs. Workshops do not have schedule conflicts with the technical sessions. An abstract is included in the proceedings.

ACM STUDENT RESEARCH COMPETITION (SRC) (2 pp. max; 3-hour poster) Undergraduate and graduate student ACM members are invited to submit individual research contributions from all areas of CS. An abstract is included in the proceedings.

BIRDS OF A FEATHER (BoF) (1 p. max; 50 min., no A/V) BoFs provide an environment for colleagues with similar interests to meet for informal discussions. An abstract is included in the proceedings.

DEMOS (2 pp. max; 90 min.) Demos showcase the relevance, potential, and innovation of a tool and allow time for discussion with its creator in the exhibition hall. Proposals include an abstract and power/A/V/space needs. An abstract is included in the proceedings.

LIGHTNING TALKS (500 words max; 5 min.) Lightning talks describe works in progress, new and untested ideas, or opportunities for collaborative work; an excellent way to spark discussions and get feedback on an idea. An abstract is included in the proceedings.

NIFTY ASSIGNMENTS (1 p. max; 15 min.) Nifty Assignments promote and share successful assignment ideas with materials for others to adopt and adapt for their use. Proposals include a short description of the assignment, target population, strength and weaknesses, and what computing concept it teaches. An abstract is included in the proceedings.

POSTERS (2 pp. max; 2 hours) Posters describe CS education materials or research, particularly works in progress. Posters enable one-on-one discussion with conference attendees. A 1-page extended abstract is included in the proceedings.

PRE-SYMPOSIUM & AFFILIATED EVENTS (2 pp. max; 1-8 hours) Affiliated organizations are invited to submit proposals for events, including: target audience, # participants, duration, topic, schedule, power/A/V/space needs, and organizers. Event organizers are expected to cover the cost of the room, food, and/or A/V through attendance registration fees or event organizer budgets. Cost information will be available on the conference website. Early submission is encouraged. Events will be considered on a rolling basis until either the due date (Friday, August 23, 2019) or we run out of space.

IMPORTANT DUE DATES

Friday, August 23, 2019: Paper Abstracts, Pre-symposium & Affiliated Events

Friday, August 30, 2019: Full Papers, Panels, Special Sessions, Workshops

Friday, October 18, 2019: ACM SRC, BoFs, Demos, Lightning Talks, Nifty Assignments, Posters

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