

Title: Innovations and Opportunities in Liberal Arts Computing Education

Abstract: Organized by members of the SIGCSE Committee on Computing Education in Liberal Arts Colleges, this Affiliated Event will promote connection and collaboration within the liberal arts computing community. This full day event will be split into two sessions. The morning session will focus on topics covering the breadth of opportunities and challenges faced by liberal arts computing educators. These topics may include innovative courses, curricula, or co-curricular programs, DEI initiatives, academic and career advising, faculty recruiting and retention, and other issues as identified to have a specific liberal arts perspective. Topics for discussion will be solicited from the community at large and selected submissions will be presented and discussed at the event, with materials and/or notes added to the Committee's growing repository of materials. The afternoon session will focus on the ACM/IEEE/AAAI CS2023 draft curriculum model. Members of the Committee will lead a workshop based on a liberal-arts focused process they have developed for curriculum review and revision that balances institutional identity with external guidelines for CS curricula. Feedback from this session will inform both the process under development and the Committee's advocacy efforts with the ACM/IEEE/AAAI curriculum task force. Throughout the event, sessions will give participants an opportunity to learn about work already taking place within the liberal arts computing community as well as to engage in Q&A and breakout discussions. All interested faculty and students are welcome.

Proposers:

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Event URL: <https://computing-in-the-liberal-arts.github.io/SIGCSE2023-Affiliated-Event/>

Significance and Relevance of the Event Topic/Purpose: The SIGCSE Liberal Arts Committee is charged to support and represent faculty teaching computing as a component of a liberal education. This includes a commitment to providing opportunities for members of our community to gather, share information, collaborate, and discuss our goals. This event builds on our 2020, 2021, and 2022 affiliated events and reflects input from the community at those sessions about priorities for this year. Despite the disruptions to and split-modality of the Technical Symposium over the past three years, we continue to have significant consistent attendance at these events, reaching room capacity for our in-person events in 2020 and 2022 and with 250 registrants for our virtual 2021 event. This year's afternoon session on CS202X and its impact on liberal arts CS curricula is particularly significant and timely.

Intended Audience and Attendance: The intended audience consists of faculty teaching computing as a component of a liberal education. We expect these faculty will come primarily but not exclusively from liberal arts colleges. Attendees may also include graduate and undergraduate students with an interest in liberal education. Based on email list membership, survey responses, and participation in past Committee events, we anticipate approximately 40-60 attendees.

Expertise of Organizers: The event proposers represent the leadership of the ACM SIGCSE Committee on Computing Education in Liberal Arts Colleges and have participated in or been Working Group leaders for previous Technical Symposium Affiliated Events sponsored by the Committee. The presenters for the afternoon session represent the authorship of a companion volume article solicited by the ACM/IEEE/AAAI Task Force about the liberal arts perspective on CS2023.

Modality and Event Time Preference: This will be an in-person event. We prefer to hold this as an all-day event (morning and afternoon) on Wednesday, prior to the Technical Symposium.

Rough Agenda for the Event: This event will be broken into two sessions, each a half day. The morning session will focus on topics submitted by the community at large, as described in the abstract above. Selected submissions will be briefly presented, roughly 5-10 minutes each. Breakout sessions will then be used to allow attendees to discuss these topics in small groups with the presenter and other interested attendees. Depending on the number of submissions and range of topics, the agenda might have all topics presented first and then proceed into two rounds of breakout discussions (to allow participants to focus on more than one topic). Alternatively, we may have two sub-sessions of topics presented followed by a breakout session for just those topics.

The afternoon session will be run as a workshop focused on CS2023 and how liberal arts institutions can use it in their curriculum review and revision process. Attendees will get an overview of CS2023 and the Committee's involvement in crafting a liberal arts response to the proposed new curriculum guidelines. From there, attendees will be led through the opening stages of a "process workbook" that the Committee has developed that helps programs articulate their identity and make strategic choices about revising their curriculum in the light of CS2023. With CS2023 still in draft form, the focus will be on the early stages of the process workbook, while making some use of the draft content. In addition to helping programs get started on our workbook, the Committee will collect feedback to help improve the process and workbook. Attendees will be given access to updated versions and guidance following the session to allow them to continue the work begun at this session once they return to their institutions.

Submission Guidelines: Submissions will be solicited for contributions to the morning session. Submissions will consist of brief (1 to 2 page) descriptions of the topic proposed for presentation. Submissions should either: (a) describe an innovation (a course, curriculum, program, etc.) with information about why it was adopted and how it has been successful; or (b) describe an issue/challenge with context and analysis to provide a useful or novel understanding of that challenge. In all cases, submissions should clearly demonstrate the connections to a uniquely liberal arts philosophy or context. Templates and examples for submission will be provided on the event website. Those submissions most suitable to adaptation/adoption across institutions will be given preference for presentation and discussion. Submissions that support efforts to broaden participation in computing will be particularly encouraged.

Laptop Optional

Audio/Visual and Room Setup Requirements: We will need to have a basic projection system available along with at least one microphone. A round-table room setup that can accommodate about 50 people would be ideal.