

EduCHI 2022

4th Annual Symposium on HCI Education

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ABSTRACT

EduCHI 2022 will bring together an international community of scholars, practitioners, and researchers to shape the future of Human-Computer Interaction (HCI) education. Held as part of the CHI 2022 conference, the two-day symposium will feature interactive discussions about trends, curricula, pedagogies, teaching practices, and current and future challenges facing HCI educators. In addition to providing a platform to share curriculum plans and teaching materials, EduCHI 2022 will also provide opportunities for HCI educators to learn new instructional strategies and deepen their pedagogical knowledge.

CCS CONCEPTS

• **Social and professional topics** → Professional topics; Computing education.

KEYWORDS

HCI education, HCI curriculum, HCI pedagogy, Community of Practice

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1 BACKGROUND

The past few years has seen rapid growth of an international Community of Practice (CoP) dedicated to Human-Computer Interaction (HCI) education. The root of these efforts began in 2011 when the ACM Special Interest Group on Computer-Human Interaction (SIGCHI) Executive Committee sponsored a project to investigate the present and future of HCI education [1] with the ultimate goal of updating the ACM SIGCHI Curricula for Human-Computer Interaction (published back in 1992) [4]. Throughout this project, a common request from HCI scholars and educators was the creation of a living curriculum, or an evolving online collection of course outlines, curricula, and teaching materials [2]. Subsequent efforts to build support and interest in this initiative included workshops at CHI 2014 [3] and AfriCHI 2016 [5], additional data collection at CHI 2017 [6, 7] and, finally, a workshop at CHI 2018 [11] to launch the creation of a Community of Practice (CoP) dedicated to building excitement and interest in the living curriculum [9].

The HCI Education CoP has two parallel aims: (1) creating channels to discuss issues pertinent to HCI education and (2) providing a platform for sharing HCI curricula and teaching experiences. The EduCHI Symposia, held in conjunction with the CHI conference for the last three years, have played a vital role in growing and sustaining the HCI Education CoP by providing opportunities for educators to reflect on current and future HCI education trends and also offering a venue to share insights about successful HCI curricula, pedagogies, and teaching practices.

We must also acknowledge the vital role a CoP can play in helping educators navigate pressing issues and challenges: (1) the COVID-19 pandemic and its associated economic, public health, and mental health fallout; and (2) the struggle for racial justice and equality, galvanized by the May 2020 death of George Floyd at the hands of a white police officer in Minnesota. In the former case, HCI educators are being asked to adopt new remote learning platforms and tools and keep students engaged and supported, while also maintaining their own mental and physical well-being. In the latter case, HCI educators are seeking ways to actively diversify and decolonize their curricula to create inclusive, safe, and welcome spaces for all learners regardless of race, gender identity,

religion, or culture. The HCI Education CoP held two virtual events in the summer 2020 to initiate conversations and discuss and share strategies around these topics. In these uncertain and difficult times, these discussion channels and platforms offer educators a valuable lifeline to a community of supportive and knowledgeable experts and peers.

Following up on these efforts, past successes of EduCHI events, and the growing interest for the topic of HCI education, we propose a two-day symposium for EduCHI 2022. A two-day symposium will provide participants with opportunities to get to know each other, participate in multifaceted discussions, and engage in deep collaborative work on several HCI Education challenges. To that effect, our goals for EduCHI 2022, the 4th Annual Symposium on HCI Education, are as follows:

- Continue growing the HCI education CoP;
- Provide a platform for discussing current and emerging trends in HCI education;
- Share innovative pedagogies and teaching methods by HCI educators to enhance broader teaching practice; and
- Promote and support a global, diverse, and inclusive vision for HCI education.

2 ORGANIZERS

The team below includes faculty, industry professionals, and students who are active HCI educators and researchers, many of whom were also involved in organizing the CHI 2019 EduCHI Symposium on Global Perspectives on HCI Education [10], the CHI 2020 EduCHI Symposium on HCI Education [12], and the CHI 2021 EduCHI Symposium on HCI Education [8]. The first two authors were also the lead organizers of the initial CHI 2018 workshop on Developing a Community of Practice to Support Global HCI Education (W25) [11].

Craig M. MacDonald is an Associate Professor in the School of Information at Pratt Institute where he developed the Master of Science in Information Experience Design program and directs the Center for Digital Experiences, a student-driven, faculty-led UX consultancy and academic research lab. He holds a Ph.D. in Information Studies and Human-Computer Interaction from Drexel University and his research focuses on building organizational UX capacity in practical settings and strengthening HCI/UX education.

Olivier St-Cyr is an Assistant Professor, Teaching Stream in the Faculty of Information at the University of Toronto, in Toronto, Canada. He is the liaison for the iSchool User Experience Design (UXD) concentration. His research interests lie in the areas of HCI education and HCI curriculum development. Prior to joining the University of Toronto, he spent eight years working in industry on HCI related projects.

Colin M. Gray is an Associate Professor at Purdue University, where he is program lead for an undergraduate major and graduate concentration in UX Design. His research focuses on the ways in which the pedagogy and practice of designers informs the development of design ability, particularly in relation to ethics, design knowledge, and professional identity formation. His work crosses multiple disciplines, including human-computer interaction, instructional design and technology, design theory and education, and engineering and technology education.

Leigh Ellen Potter is an adjunct associate professor at Griffith University, Australia. Through both her research and her industry work, Dr Potter has specialised in participatory design, user experience, usability analysis, and technology evaluation. Her work explores the application of emerging technology in teaching situations, and the active involvement of students as design partners in the development process. She was awarded the Griffith Award for Excellence in Teaching (Innovation in Learning Design), and is a Fellow of the Griffith Learning and Teaching Academy.

Carine Lallemand is an Assistant Professor in the Industrial Design Department at the Eindhoven University of Technology (TU/e) and the University of Luxembourg. Her research focuses on the development of user experience design and evaluation methods, as well as designerly ways to trigger behavior change for healthier lifestyles. She is also a passionate educator, who likes to innovate and reflect on the pedagogy and practice of design.

Anna Vasilchenko is a researcher at Open Lab, Newcastle University, UK. Anna's research interests are centered around innovative methods of teaching and learning for STEM subjects in higher education, while specific focus of her PhD project was on HCI and Ubicomp education. For that, she investigated how student-generated content and blended learning, which are built around ideas of 'learning through making' and 'peer learning', could help to address some of the challenges in teaching such a multifaceted field as HCI.

Jaisie Sin is a graduate student at the Technologies for Aging Gracefully Lab and the Faculty of Information at the University of Toronto, in Toronto, Canada. There, she is a teaching assistant and course instructor for various courses in human-computer interaction, computer programming, and software design. She also holds a Master of Information in User Experience Design from the University of Toronto. Her research focuses on inclusive design for underrepresented users like older adults.

Anna Carter is a PhD student in the Centre for Doctoral training at Swansea University where she is focusing on enhancing human interactions and collaborations with intelligence driven systems. Swansea City and County are stakeholders within the PhD project which involves deploying a range of technologies within the £1.3bn city regeneration project. Her research focuses on using human centred methods to co-create an immersive digital experience throughout the city centre using a range of next generation technologies created through participatory design.

Caroline Pitt is a PhD candidate in the Information School at the University of Washington, Seattle, affiliated with the Digital Youth Lab, CTRL+F Lab, and GAMER Group. Her current research focuses on designing and implementing informal educational technologies with and for teens and their communities, as well as developing best practices for concluding long-term research-practice partnerships in informal learning settings. She is interested in further incorporating design justice and longer-term perspectives into both HCI education and practice.

Eunice Sari is a User and Customer Experience Expert and Service Designer with more than 18+ years of global experience working in academia and industries. She holds a PhD in Education with a specialization in Design Research and Educational Technology. Eunice has pioneered many forward-thinking and innovative projects to affect lives and improve businesses' bottom lines in

various vertical industries in the USA, Europe, Australia, and Asia. Eunice was the first Asian female Google Developer Expert in Product Design and Strategy and currently is the Product Design expert mentor for the Google Startups program. She has helped hundreds of international startups through Google Launchpad and Accelerator Programs to develop their products and services and improve their business. Eunice has been helping and inspiring many academics, especially in the Asia Pacific, to design their HCI, UX, and Design teaching and learning programs with out-of-the-box tools and approaches that she has developed throughout these years.

Deepak Ranjan Padhi is a Ph.D. student at IDC School of Design, Indian Institute of Technology, Bombay, India. His research focuses on HCI4D and design of Education Technologies for low-literate communities. He is the treasurer of IIT Bombay ACM SIGCHI Student Chapter, India.

Ajit G. Pillai is a PhD Candidate at Affective Interaction Lab in The University of Sydney. He regularly conducts research on the ethics of emerging technologies in HCI within industries such as healthcare. He is interested in the future of ethics education in HCI and is exploring interactive resources to augment learning experiences in affective and interactive ways.

3 WEBSITE

The symposium website (<https://educhi2022.hcilivingcurriculum.org/>) contains background information about HCI education and our motivations for holding the symposium, details about the symposium organizers, and the call for participation. It will also contain the symposium agenda and copies of all accepted papers.

4 PRE-SYMPOSIUM PLANS

We will distribute a call for participation to all attendees from our 2018 workshop as well as the 2019, 2020, and 2021 symposia. Moreover, we will distribute the call on relevant academic mailing lists, including the recently re-launched CHI-EDUCATIONlistserv, and through social media, specifically through the HCIEducationFacebook group (438 members, as of 16 December) and the [@HCI_Education](https://www.w3.org/1999/xlink) Twitter account (336 followers, as of 16 December). We will also actively solicit submissions from individuals who have expressed an interest in HCI education issues, either through their involvement in previous HCI education activities or through published research about education-related topics. Our goal is to solicit submissions from a broad and diverse range of HCI and human-centered educators, recruited from all regions of the world (e.g., Africa, Asia, Europe, North America, etc.), from different disciplinary perspectives (e.g., design, computer science, CSCW, information science, psychology, etc.), institutional perspectives (public, private, graduate, undergraduate, and historically black colleges and universities and other similar institutions), and with a variety of cultural viewpoints. EduCHI 2020 received 29 submissions, of which 14 were accepted (48%). Last year's virtual EduCHI 2021 received 15 submissions, of which 9 were accepted (64%). This year, with the adoption of a two-day format, we aim to receive 30 to 40 submissions, of which we plan to accept approximately 16-20 to be presented at the

symposium. We will promote the completed program through the same venues as above. In terms of attendance, we expect to meet or exceed the number of participants for last year's virtual EduCHI 2021 Symposium, which had 51 registered attendees (not including the organizers).

Potential presenters will be asked to submit a 4-10-page paper in the single-column ACM Master Article Submission template. All aspects and topics related to HCI education will be welcomed, including, but not limited to: research related to HCI education, effective HCI pedagogies and teaching practices (e.g., assignments/assessments, labs, studios, active learning activities, resources, readings, case study, lecture materials, online/remote teaching, diversification of HCI curricula, etc.), presentations of HCI curricula and their deployment, thought-provoking or inspirational perspectives on HCI education, or descriptions of unsolved HCI education challenges. New this year, we are also calling on HCI educators to submit a proposal for a Master Class, or a brief (60-75 minute) interactive training session on a particular topic, concept, or teaching method that can be incorporated into an HCI assignment, class, or program. We plan on accepting up to two Master Class proposals. All submissions will go through a double-blind peer review process which will allow us to select papers of high quality, provide a unique or under-represented perspective, and have potential to engage attendees in thoughtful discussions.

Following a successful acceptance, participants will be asked to prepare the final camera-ready version of their submission. Participants will also be given the option of creating a captioned pre-recorded presentation and other supplemental content about their submission (slides, video, etc.) to be published on the symposium website and distributed to attendees prior to the event.

5 SYMPOSIUM STRUCTURE

Our symposium will be a two-day event, held in conjunction with the CHI 2022 conference, in which participants will be an integral part in presenting their vision and sharing their experiences and perspectives on HCI education. The symposium will be streamed via Zoom (or a similar video conferencing platform) to enable both remote and hybrid participation options. We will also utilize online brainstorming tools (e.g., Miro) to facilitate discussion. To maximize engagement and encourage both formal and informal knowledge sharing, the symposium will feature a mix of pre-recorded and live presentations, interactive tutorials, and collaborative discussion sessions. To build the technical program, we will be soliciting five distinct types of paper submissions:

1. **Research Paper:** describe novel research on or about HCI education, following a traditional research paper format.
2. **Provocation:** present a new, controversial, inspiring, or otherwise thought-provoking perspective on or about HCI education.
3. **Teachable Moment:** describe and/or demonstrate an interesting or innovative teaching method, curricular approach, or other pedagogical tools for HCI educators.
4. **Unsolved Challenge:** outline an unsolved problem, issue, or challenge faced by HCI educators and solicit a request for solutions that may address it.

Table 1: Proposed 2-Day EduCHI 2022 Symposium Schedule

Time	Session
DAY ONE	
09:00 - 09:15	Welcome, Day 1: agenda, background, and goals
09:15 - 10:30	Master Class Session I
10:30 - 11:00	Break
11:00 - 12:30	Paper Session I <i>Research Papers, Provocations, Teachable Moments</i>
12:30 - 14:00	Break
14:00 - 15:30	Discussion Session I <i>Unsolved Challenges</i>
15:30 - 16:00	Break
16:00 - 17:00	Paper Session II <i>Research Papers, Provocations, Teachable Moments</i>
17:00	<i>Post-event social event/networking</i>
DAY TWO	
09:00 - 09:15	Welcome, Day 2: agenda, background, and goals
09:15 - 10:30	Master Class Session II
10:30 - 11:00	Break
11:00 - 12:30	Paper Session III <i>Research Papers, Provocations, Teachable Moments</i>
12:30 - 14:00	Break
14:00 - 15:30	Discussion Session II <i>Unsolved Challenges</i>
15:30 - 16:00	Break
16:00 - 17:00	Closing

5. **Master Class:** propose a brief (60-75 minute) interactive training session on a particular topic, concept, or teaching method that HCI educators can incorporate into an assignment, class, or program.

The program will be split across two days, with each day featuring at least one Master Class session and two or three sessions featuring a combination of presentations (research papers and provocations), interactive demonstrations (teachable moments), and open discussions (unsolved challenges). The first day of the symposium will also begin with a brief overview of the symposium goals, and the second day will conclude with a brainstorming session about the future of the HCI Education Community of Practice. After day 1, we will invite participants to a virtual networking event where they will be able to informally meet their old and new colleagues and/or continue discussions started earlier at the symposium. We will also provide other asynchronous discussions/activities for participants who are unable to attend in real-time.

Table 1 provides our proposed symposium schedule. The listed session times are provided only as estimates; final session times will be decided based on the type of presentations, the time zones of presenters and attendees, and the final symposium format. Our Accessibility Chairs will be responsible for ensuring all participants can participate in all symposium activities.

6 POST-SYMPOSIUM PLANS

All paper abstracts and presentations will be archived on the symposium website. For full papers, authors will be given the option

of having their paper archived on the symposium website or some other digital repository. Moreover, we will post a link to the online brainstorming document created during the symposium, which will capture notes and resources shared by attendees during the event. We will also keep the HCI education community aware of developments through our Facebook HCI Education group and our Twitter account (@HCI_Education). Further, we will continue organizing virtual meetings on issues discussed at the symposium and other topics of interest to the HCI education community.

7 CALL FOR PARTICIPATION

EduCHI 2022, the 4th Annual Symposium on HCI Education, will bring together an international community of scholars, practitioners, and researchers for a series of presentations and interactive discussions about HCI education trends and challenges. As a platform for sharing HCI curricula, materials, and teaching experiences, we seek five types of submissions:

Research: Describe novel research on or about HCI education, following a traditional research paper format.

Provocation: Present a new, controversial, inspiring, or otherwise thought-provoking perspective about HCI education.

Teachable Moment: Describe an interesting or innovative teaching method, curricular approach, or other pedagogical tool for HCI educators.

Unsolved Challenge: Explain an unsolved HCI education problem or other concern for HCI educators. A selection of these challenges will be discussed during the symposium.

Master Class: Propose a brief (60-75 minute) training workshop on a topic, concept, or teaching method relevant for HCI educators.

To apply, authors should prepare a 4-10-page paper using the ACM Master Article Submission template and submit it via eduCHI2022.hotcrp.com by **11 February 2022**.

Each submission will go through a double-blind review process focused the paper's overall quality, its originality and uniqueness, and its potential to engage attendees in thoughtful discussions. Following a successful acceptance, authors will be asked to prepare a final camera-ready version and given the option of creating a prerecorded presentation that will be shared on the symposium website at . At least one author of each accepted paper must register for the symposium.

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