BTES
BUILDING TECHNOLOGY EDUCATORS' SOCIETY

AUBURN UNIVERSITY

2021 Building Technology Educators' Society Conference – Call for Submissions

**Virtual and In-person Conference hosted by Auburn University
Auburn, Alabama
June 10 – 12, 2021**

Out of Bounds

Crossing Disciplines in Teaching Technology

About the Theme

Alabama has long been a supplier to the U.S., where the sounds of Muscle Shoals and the flavors of Mobile Bay have contributed to its cultural memory, and its fertile soils and seas of southern pine have helped build its material culture. The state's role as a supplier has benefited some of its inhabitants but come at the expense and exploitation of others. Modernity and globalization have further complicated the social, economic, and ecological implications of Alabama's role as a supplier, even as it becomes more ingrained in broader material networks. The conceptual role of this conference is to elucidate supply chains and their impacts, here and elsewhere, through the lens of technology and innovation in the built environment. We ask attendees to step Out of Bounds, into disciplines outside their own, examining impacts outside their purview, in an environment with which they may be unfamiliar. The organizer's intent is that, in doing so, we can better understand the role buildings play in supply chain and become more attuned educators of building technology.

The Building Technology Educator's Society advances design education by disseminating its members' work and facilitating their interaction. This is critical not only for students of the building disciplines, but also for those who rely on the work of those future professionals. The BTES Conference is both a celebration of this effort and its most dense expression. Auburn University is a Land Grant institution that prides itself on a robust balance of teaching, research, and outreach efforts within its region, and because of its trans-disciplinary contributions to the built environment and location in the deep south, we extend the theme of a conference Out of Bounds.

Out of Bounds acknowledges that we are working outside of normal settings, and it asks participants to embrace this new modality. For all building technology practitioners, teachers, and researchers, the COVID-19 pandemic has altered how we work. This change is also a product of the built environment; to the extent that buildings are designed for social activity, they are themselves a threat to human health. We've changed how we interact with our spaces and with each other, simultaneously altering how we use building technology and how we teach building technology. The organizers' intent is to capitalize on our new facility with remote platforms for conference paper sessions and speakers. Content will be shared and delivered synchronously through pre-recorded video and live videoconferencing formats.

Out of Bounds also encourages participants to extend beyond the boundaries COVID-19 has created. Though, for parity, paper sessions and speakers will be hosted in a remote format, the conference offers several immersion opportunities that engage with the supply chain environment around Auburn and Alabama. In our region, the forest products industry provides the most accessible example of supply chain and its impacts. Southern pine has long provided the nation with reliable means of structuring the built environment. Out of Bounds will include visits to sites that influence how things are built in the region now, historically, and in the future, including a nearby demonstration forest, the SmartLam CLT plant, Auburn's new Advanced Structural Testing Laboratory, and Auburn's Rural Studio in Hale County.

These discussions will take place in July through a series of three webinars (dates and times will be coordinated with selected presenters). Each webinar will begin with short presentations by a selection of BTES members, followed by a moderated conversation between the presenters and the audience. Our goals for this webinar series will be to talk about the successes and the failures of teaching technology-centered courses on a virtual platform, to share ideas and to receive feedback on what was implemented this spring, and to facilitate an understanding of what challenges lay ahead, specifically for those who will be continuing to recreate courses in time for the Fall term.

Call for Submissions
To foster discussion on crossing disciplines in Teaching Technology, the BTES 2021 Conference Committee seeks papers and projects on a broad range of topics that address how global developments drive our work and new, trans-disciplinary collaborations reveal creative approaches to our teaching and research. How do the pandemic-driven modes of teaching and socialization present opportunities for pedagogy development? How do the exigencies of climate change affect how we organize priorities in design? How does the development of software tools affect how we evaluate and communicate critical design ideas? And how can hands-on experience with proven and novel materials change how we understand their potential for design? Papers and projects that address issues of trans-disciplinary and far-reaching teaching and research are particularly welcome, but we look forward to a broad mix of submissions that will encourage curiosity, provide a creative spark, and foster energetic discussion.

We are looking for examples of excellent teaching processes and outcomes, exploring projects, pedagogies, methodologies, research, and best practices in building technology education. Papers and projects across all thematic categories will be reviewed by subject matter experts to provide content-specific peer review. All submitted papers and projects should refer to- and build on relevant scholarly literature within their respective fields including practice, research, education, and design.

As a remote conference, there will be no "poster session" and no poster submissions. To capitalize on digital production and presentation modes, we are seeking Project Shorts in lieu of posters. Project Shorts are brief videos that describe, like a poster, the processes and products of projects in teaching and research. Project Shorts are distinct from paper presentations and can be composed as montage, still images and narration, animations, hybrids, or any

other time-based composition that best describes the work surrounding a particular project.

The session topics listed below suggest a revision of the normative boundaries for our work. They encourage submitters to re-evaluate the context of their work and the boundaries of their area of expertise. The list of topics will be the basis for paper and Project Short peer-review streams.

Carbon
Carbon cycles are not the purview of any one discipline or any singular part of supply chains. Understanding and managing the flow of carbon comes from understanding material and energy cycles through a broad set of disciplines.

Time
Questions about time are inevitably questions about timescale. Forwards or backwards, the scope of our inquiry is guided by objectives and values for research and pedagogy.

Measurement
Methods for measurement evolve and expand with changes in the demand for data and available technology. We measure different parts of the building process and for different audiences.

Land
If architecture is tied to the land, architectural technology affects its myriad reciprocal landscapes. Extraction, displacement, and renewal are all technological processes.

Low-Tech
Often technology implies high-technology, rendering low-technology anachronistic. But the processes by which buildings are formed are overwhelmingly low-tech.

High Tech
Computation has pushed opportunities for design and visualization, and the design disciplines have pulled the advancements in software and fabrication towards their demands.

Practice
Building technology in practice varies from building technology in curriculum. They inform each other towards the development of more impactful building practices.

Paper Submission Process
Authors are asked to submit a 500-word abstract, supporting images, and keywords. Based upon keywords, papers will be tracked into one of seven peer-review session topics. Papers will be reviewed in a two-stage process. Abstracts will be double-blind peer reviewed by subject matter experts. Reviewers will be asked to evaluate abstracts and papers based on relevance to the conference and track them as well as the paper's innovativeness, conceptual grounding, rigor of methodology, quality of evidence presented, importance of findings, and clarity of communication. Authors with accepted abstracts will be required to prepare the paper for publication and agree to

prepare a video presentation for the virtual conference. Recorded presentations will be submitted 1 month prior to the conference. The presenters will be present in the virtual conference to answer questions and to participate in discussions. Papers that are not presented at the conference will not be included in the Proceedings.

Final papers will be developed through a round of full paper peer review. Final papers are not due until post-conference to allow authors to incorporate discussions and additional research into the final paper.

Project Short Submission Process
Authors are asked to submit an abstract, image-based storyboard, and keyword. Project Shorts may describe complete research, design, or pedagogical work, or may provide insight into works in progress. Project Shorts will be double-blind peer-reviewed. Evaluation will be based on both content and visual communication. Selection for the exhibit will be based on innovation, clarity, and relevance to the conference theme. Creators with accepted abstracts and storyboard proposals will be asked to develop their work into a 3-5 minute video and 500-word abstract. Videos will be shown during the conference; authors will be available to answer questions.

The submission portal at *cadc.auburn.edu/event/btes2021* will be available October 2020.

Please email btes21@auburn.edu with any questions.