

Laurin Buchanan to present on Cybersecurity Education at NICE K12 Conference

Laurin Buchanan, Principal Investigator for cybersecurity education research at Secure Decisions and cochair of the National Initiative for Cybersecurity Education (NICE) Working Group K12 Subgroup, will be attending and speaking at the 2019 NICE K12 Cybersecurity Education Conference in Garden Grove, California, December 9-10.

Laurin's presentation, titled *CyberMiSTS: Curriculum for Teachers & Students*, will discuss initial outcomes from the Curriculum to Broaden Participation in Cybersecurity for Middle School Teachers and Students (CyberMiSTS) project. Funded by NSF, CyberMiSTS seeks to develop and disseminate a curriculum and resources for giving Career and Technical Education (CTE) teachers in middle schools the knowledge, skills, and tools they need to teach cybersecurity to their students. Rather than dive deeply into the underlying math and science, CyberMiSTS focuses on key concepts and big questions to encourage participation from a broad and diverse set of students.

The first cohort of teachers attended a two-week workshop in the summer of 2019, where they learned from experts on cybersecurity topics and about the diverse cybersecurity work roles and career paths. Each teacher developed a custom cybersecurity curriculum for their students, without requiring any coding or programming. Teachers also created a branching web comic aligned with their lesson plan using Comic-BEE, Secure Decisions' web application for cybersecurity education. The teachers are using in their classrooms the cybersecurity curriculum they created during the CyberMiSTS workshop.

The presentation, scheduled for 9:30 am - 10:10 am, on Monday, December 9^{th} (Track 5: Promoting Cyber Awareness), will highlight the CyberMiSTS curriculum approach. Laurin will also share lessons learned and an initial analysis of data collected during the workshop, including changes in teacher understanding of cybersecurity concepts and their reported self-efficacy in teaching cybersecurity.

The NICE K12 Cybersecurity Education Conference brings together educators, faculty members, professionals, researchers, non-profit personnel, other K12 curriculum specialists, and students with the goal of developing a comprehensive agenda focused on the challenges of cybersecurity education at the K12 level. Presentations will explore the themes of cybersecurity career awareness, infusing cybersecurity across the education portfolio, highlighting innovative cybersecurity educational

approaches, designing cybersecurity academic and career pathways, and promoting cybersecurity awareness. You can register for the conference here.

CyberMiSTS is funded by an award from the National Science Foundation, under the Secure & Trustworthy Cyberspace: Education (SaTC: EDU) Program, Award Abstract #1821757. You can learn more about the project here.