

EDUCON2021 Special Session

CyberEduCOVID-19 – Cybersecurity Education during the COVID-19 Pandemic Era

Overview

COVID-19 has been disruptive to the education system worldwide. Are we ready to embrace the changes? Most academic institutions have advised their students to study-at-home rather than attending lectures and hands-on activities on-campus, because of the pandemic. In fact, the pandemic has dramatically altered the teaching approaches and methodologies of disseminating knowledge. Many institutions and universities are trying to adopt and adapt new ways of teaching. Many are still perturbing and puzzled about assessments and evaluations. Lectures, quizzes, tutorials, advising sessions, and examinations are conducted online, using online educational platforms and applications, such as the Blackboard system. In addition, virtual platforms and simulation tools are used to offer hands-on lab activities. Cybersecurity teachers have adopted many tools like, Cisco Packet Tracer, GNS3, Kali Linux, Docker Containers, and Virtual Machines that allow students to implement a diversity of hands-on lab exercises, in a simulated environment from their homes. Student activities that require face-to-face meetings and team-work, such as undergraduate projects and thesis supervision, are difficult to conduct; indeed, many academic institutions have deferred these indefinitely. As a consequence of the pandemic, instructors are required to develop new innovative teaching methodologies, assessment approaches and tools to assess their course outcomes and student performance.

This special session (CyberEduCOVID-19) within the EDUCON 2021 Conference, April 2021, Vienna, Austria, aims to cover all aspects of an innovative education approach for cybersecurity. What are the best practices, lessons learned, teaching methodologies, new applications, and tools that proved to be useful and productive during the pandemic era, towards ensuring course outcomes, student performance, and successful assessment of cybersecurity courses? The main goal of this special session is to bring together cybersecurity instructors, curricula/programs developers, and industry partners to disseminate the latest research findings, tools, and share good practices on cybersecurity education during the COVID-19 pandemic. A great opportunity to share different perspectives on pedagogy, educational technology, course development, effective teaching, student advising, and assessment.

Topics

Authors are invited to submit complete articles for the CyberEduCOVID-19 special session (no abstracts needed). The topics cover all aspects of innovative cybersecurity education approaches, methodologies, applications and tools applicable during a pandemic, including but not limited to the following:

- Course outcomes and student performance assessment approaches.
- Applications and tools for teaching cybersecurity.
- Cybersecurity project-based learning.
- Learning cybersecurity scenarios.
- Hands-on lab activities-based teaching and learning.
- Virtual platforms and tools for hands-on lab activities.
- Experience reports.
- Teaching case-studies.
- Teaching methodologies.
- Personalization of teaching approaches.

Program Committee

Chair

- Zouheir Trabelsi (chair), College of Information Technology, UAE University, UAE, trabelsi@uaeu.ac.ae

Members

- Pin-Han Ho, University of Waterloo, Canada.
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- Masud Mohamed Mehdy, College of Information Technology, UAE University.
- Kadhim Hayawi, College of Technological Innovation, Zayed University, UAE.
- Sujith Samuel Mathew, College of Technological Innovation, Zayed University, UAE.

Important Dates

07 Dec 2020	Submission of completed papers, and Student Poster (no abstracts)
13 Jan 2021	Notification of Acceptance, and Author Registration open
17 Feb 2021	Author/Early Bird registration, Camera-ready submission for all submission types
20 Apr 2021	Pre-conference Workshops
21 Apr 2021	Conference Opening