IEEE EDUCON 2021 - Austria

Challenges in Remote Learning for Engineering and Computer Science Education Caused by the COVID-19 Crisis: Methods and its Applications in Lectures, Labs, Tutorials, and Assessments

Overview

*Improving and enhancing education has been a prime goal for higher learning institutions that seek to provide better learning techniques, technologies, educators, and to generate knowledgeable students to fulfill the needs of industries and businesses. A significant area where improvements are necessary is the Engineering Education and Computer Science Teaching and Learning. **This special session** aims to bring together leading academic scientists, researchers, and research scholars to exchange and share their experiences and research results on all aspects of remotely teaching Engineering Education and Computer Science in Higher Education especially during the COVID-19 crisis. It also provides a premier interdisciplinary platform for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered, and solutions adopted in the fields of Informatics and Computer Science (ICS) remote and blended engineering education.*

The goal of this special session is to investigate the impact of Internet and cloud-based methods on ICS Engineering Education and to provide a focused discussion on innovative topics. Specifically, contributions should focus on the development and use of software, hardware devices, and, more generally, advanced technologies (e.g., new-generation mobile networks, artificial intelligence, etc.) aiming to support ICS

learning/teaching and to improve learners performance. Papers focusing on challenges during the COVID-19 crisis are especially welcome.

Prospective authors are kindly encouraged to contribute to and help shape the session through submissions of their research papers and practical experience reports. High quality research contributions describing original and unpublished results of conceptual, constructive, empirical, experimental, or theoretical work in all areas of ICS Education and practice are cordially invited for presentation at the session.

Topics
1. Pedagogical issues in remote teaching and learning
2. Student engagement during remote teaching
3. Remote innovative assessment methods for ICS
4. Conducting remote and off-line ICS labs during contingency
5. Mathematics and Physics Tutorials remote delivery
6. Maintaining and conducting ICS collaborative work and team projects
7. Plagiarism issues
8. Variance in delivery methods over The Internet
9. New technologies
10. Learning Analytics
11. Learning disability and visual impairment
12. Digital Transformation
13. Innovations and Changes Engineering Education
14. Innovations and Changes in Methods as well as Application in Engineering Education
15. Synchronized, Asynchronized, and Hybrid Learning
16. Measurements for Good Teaching Practises during COVID-19
17. Challenges in Teaching and Learning

Paper Submission
Submit **anonymous** complete paper in PDF (max 10 pages) without the authors' names in the corresponding special track. Here is the template.

All paper submissions are subject to a double-blind reviewing process.

Program Committee
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