

EAEEIE 2022, 29 June - 1 July 2022 | Coimbra, Portugal

Wednesday, 29 June			
08:30–09:15	Registration / Check in		
09:15–09:30	EAEEIE Opening ceremony		
09:30–10:30	Electronics and Microelectronics challenges for facing the digital society limitations Keynote Speaker: Olivier Bonnaud		
10:30–11:00	Coffee break		
11:00	<table border="1"> <tr> <td style="background-color: #4F81BD; color: white; text-align: center;"> TS1A - ISEC Auditorium Topics: Distance education methods and technologies in a pandemic situation Distance, open and flexible education </td> <td style="background-color: #A8A84F; color: white; text-align: center;"> TS1B - Americo Pinto DEE Auditorium Topics: Educational methods and innovations in engineering education Virtual and remote labs </td> </tr> </table>	TS1A - ISEC Auditorium Topics: Distance education methods and technologies in a pandemic situation Distance, open and flexible education	TS1B - Americo Pinto DEE Auditorium Topics: Educational methods and innovations in engineering education Virtual and remote labs
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11:00–11:15	Self-directed learning readiness: A case of ICT students at Lapland University of Applied Sciences - Sanna Laine , Mikko Kivikoski , Mikko Myllymäki , Risto Honkanen , and Ismo Hakala Hybrid education in the field of digital technologies - Tomas Zeman and Pavel Lafata		
11:15–11:30	Efforts to Improve Education Efficiency and Student Motivation in the Digital Era and Pandemic Times - Georgi Hristov , Diyana Kinaneva , Plamen Zahariev , and Georgi Georgiev Remote IoT teaching across the North-Atlantic - Saemundur E Thorsteinsson , Helgi Thorbergsson , Kristinn Andersen , and Ian F. Akyildiz		
11:30–11:45	The students' perspective of the engineering education during the pandemic and afterward - Neringa Dubauskiene , Vilmante Kumpikaite-Valiuniene , Algimantas Valinevicius , Darius Andriukaitis , Jurgita Baryniene , Vitalija Jakstiene , Mindaugas Zilyys , Dangirutis Navikas , Asta Daunoriene , Jovita Vasauskaite , and Vida Malinauskiene Remote access laboratory setup for physical computing courses - Kyriakos Mouratis , Georgios Stivaktakis , and Michael Sfakiotakis		
11:45–12:00	Administrative Challenges Faced During Online Teaching and Learning in the Context of the Coronavirus Pandemic - Eugen Ganea , Marius Marian , and Dorin Popescu Conducting an Electronics Remote Lab Experiment: A Case Study - Kristinn Andersen , Saemundur E Thorsteinsson , Helgi Thorbergsson , and Karl S Gudmundsson		
12:00–12:15	Online Engineering Education in Times of Pandemic - A Case Study - Dorin Popescu , Marius Marian , and Eugen Ganea Remote Arduino Labs for Teaching Microcontrollers and Internet of Things Programming - Spyros Panagiotakis , Konstantinos Karampidis , Manos Garefalakis , Agapi Tsironi-Lamari , Ioannis Rallis , Zacharias Kamarianakis , and Giorgos Papadourakis		
12:30–14:30	Lunch		

Wednesday, 29 June		
14:30	TS2A - ISEC Auditorium Topics: Distance education methods and technologies in a pandemic situation Distance, open and flexible education	TS2B - Americo Pinto DEE Auditorium Topics: Educational methods and innovations in engineering education Virtual and remote labs
14:30–14:45	Taking a mass participant course in digital design from local to online during the Covid-19 pandemic - Andri Þorláksson , Helgi Thorbergsson , Saemundur E. Thorsteinsson , Karl Gudmundsson , and Kristinn Andersen	Considering Universal Design Principles and Guidelines in a Laboratory Based Module Providing an Introduction to Microcontroller Based Embedded Sensor Systems Design - Ian Grout
14:45–15:00	Effect of Distance Teaching on Student's Course Evaluations - Marko Hölbl , Lili Nemec Zlatolas , and Marko Kompara	A study of microcontroller simulator tools for autonomous and online learning - Fernanda Coutinho , Marco Silva , and Jorge Barreiros
15:00–15:15	A pilot initiative for international virtual internships in the area of higher education - Plamen Zahariev , Georgi Hristov , Diyana Kinaneva , and Georgi Georgiev	LCP: FPGA based processors for education - Nikolay Kostadinov and Nina Bencheva
15:15–15:30	Internships of VET Students at Lockdown Time - Jaromír Hrad , Tomáš Zeman , and Marek Nevosad	A Web-based Platform and a Methodology to Teach Programming Languages in Electrical Engineering Courses - Inácio Fonseca , Nuno Cid Martins , and Fernando Lopes
15:30–15:45	The limits of the digitalization of the training of engineers and masters in microelectronics - Olivier Bonnaud	-
16:00–16:30	Coffee break	
16:30	TS3A - ISEC Auditorium Topics: Student attraction and motivation The student perspective of electrical and information engineering	TS3B Americo Pinto DEE Auditorium Topics: Educational methods and innovations in engineering education Experimental learning and learning experiences in engineering
16:30–16:45	Planning the Attraction and Retention of Young ICT Talents - Liliya Ilieva and Nina Bencheva	Gained knowledge by students in a course on relational databases - Lili Nemec Zlatolas , Janez Martin Kričej , and Luka Hrgarek
16:45–17:00	To avoid dropout: let student teach! Second act. - Hélène Frémont and Florent Arnal	Moving MSc Software Development course online: adaptation of the large class module to a distance learning model - Olga Pishchukhina
17:00–17:15	Engagement Contexts of Software Engineering Education Projects - E. Moira Watson and David Cutting	Applying the DevOps methodology for a more efficient process of teaching-learning computer programming - André Vicente and João Cunha
17:15–17:30	Motivation and expectations for choosing the field of Electrical Engineering: students' perceptions - Fátima Monteiro , R. M. Monteiro Pereira , Adelino J. C. Pereira , and Verónica Vasconcelos	Improving the Learning Process of Circuit Analysis at University of Vaasa - Maarit Vesapuisto , Otto Ellonen , and Timo Vekara
17:30–17:45	Evolution of Student Demand for Electrical Engineering Studies in Portugal - Fátima Monteiro and Fernanda Coutinho	First Experiences in Using STACK in Education of Circuit Analysis at University of Vaasa - Otto Ellonen , Maarit Vesapuisto , and Timo Vekara
18:30	Welcome drink	

Thursday, 30 June			
09:15–09:30	Registration / Check in		
09:30–10:30	Prophecies and Fulfillments in Computer-Aided Education: a Personal View Keynote Speaker: Carlos Fiolhais		
10:30–11:00	Coffee break		
11:00	<table border="1"> <tr> <td style="background-color: #4F81BD; color: white; text-align: center;"> TS4A - ISEC Auditorium Topics: Employability skills development International partnerships and dissemination of European projects Curriculum design </td> <td style="background-color: #A8C84F; color: white; text-align: center;"> TS4B - Americo Pinto DEE Auditorium Topics: Integration of research and industrial trends in engineering education Sustainability aspects of engineering education </td> </tr> </table>	TS4A - ISEC Auditorium Topics: Employability skills development International partnerships and dissemination of European projects Curriculum design	TS4B - Americo Pinto DEE Auditorium Topics: Integration of research and industrial trends in engineering education Sustainability aspects of engineering education
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11:00–11:15	Preparing and developing skills for better employability for STEM and engineering graduates - Anna Friesel, Edmundo Tovar, and Jaromír Hrad		
11:15–11:30	Progressive development of professional engineering skills through programmed project activities in EE - Tony Ward, Martin Coulton, and Mohammad Nasr Esfahani		
11:30–11:45	A framework to enhance students' soft skills within the context of international engineering project collaboration - Hay Geraedts, Nina Bencheva, Abigail Albuquerque, Konstantinos Karampidis, and Giorgos Papadourakis		
11:45–12:00	The European University of Technology - A perspective on building a pioneering higher education system based on a human-centred technology - Laura Grindei, Cristina Campian, Aurelia Ciupe, Luminita Todea, Sonia Munteanu, and Ligia Moga		
12:00–12:15	Design and Implementation of a Signal Processing Course to Integrate Master Studies in Sustainable Transportation and Electrical Power Systems - Fernando Lopes, Víctor D. N. Santos, Marina S. Perdigão, and Jorge García		
12:30–14:30	Lunch		

Thursday, 30 June		
14:30	TS5A - ISEC Auditorium Topics: Employability skills development International partnerships and dissemination of European projects Curriculum design	TS5B - Americo Pinto DEE Auditorium Topics: MOOC - Massive Open Online Courses E-learning and computer-based learning
14:30-14:45	Capacity development by implementation of PLC trainings towards Industry 4.0 - Tsvetelina Georgieva, Nina Bencheva, Plamen Daskalov, Hamed Yahoui, and Sitha Khemmarath	MOOC on "Ultra-dense Networks for 5G and its Evolution": Challenges and Lessons Learned - Manuel J. Lopez-Morales, D. Alejandro Urquiza-Villalonga, Diego Gonzalez-Morin, Nidhi, Bahram Khan, Farinaz Kooshki, Ahmed Al-Sakkaf, Leonardo Leyva, Hamed Farkhari, Daniele Medda, Ilias-Nektarios Seitanidis, Ayman Abu-Sabah, Joseanne Viana, Pedro Cumino, Victor P. Gil-Jimenez, M. Julia Fernández-Getino García, Máximo Morales-Cespedes, Ana Garcia-Armada, and Fernando J. Velez
14:45-15:00	Teaching About Metamaterials and Nanotechnologies - Maria J. Martins	Introductory MOOC as Part of Student Admission: Course Evaluation and Development Needs - Mikko Myllymäki, Risto Honkanen, and Ismo Hakala
15:00-15:15	Updating the Content of a Computer Vision Course for Students from the STEM Programs - Dorian Cojocar, Liviu Florin Manta, Marian Abagiu, Andrei Dragomir, and Alexandru Marin Mariniuc	Proposal of a technological cluster to support eLearning platform - Filipe Cardoso, António Godinho, J. Rosado, Filipe Caldeira, and Filipe Sá
15:15-15:30	Updating the Content of an AI Course for Students from the Robotics and Automation - Dorian Cojocar, Liviu Florin Manta, Marian Abagiu, Andrei Dragomir, and Alexandru Marin Mariniuc	Educational Service Platform for Artificial Intelligence Resources - Ilmars Slaidins, Ieva Timrote, Viktors Zagorskis, and Lauris Cikovskis
15:30-15:45	Creation of neural melodies in the frame of an international student project - Beaubois Romain, Hutsebaut Melissa, Molla David, Ikeuchi Yoshiho, Larrieu Guilhem, and Levi Timothée	-
16:00-16:30	Coffee break	
16:30-17:00	EAAEIE Council Meeting	
17:30-18:00	EAAEIE General Assembly	
19:30	Conference dinner	

Friday, 1 July	
09:15-09:30	Coffee
09:30	<div style="display: flex; justify-content: space-between;"> <div style="background-color: #0070C0; color: white; padding: 5px;"> TS6A - ISEC Auditorium Topics: Development of innovative materials in engineering education Problem-based learning Educational games and simulations </div> <div style="background-color: #808000; color: white; padding: 5px;"> TS6B - Americo Pinto DEE Auditorium Topics: Ethics and deontology Gender and diversity issues </div> </div>
09:30-09:45	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Effective creation of interactive educational objects for on-line teaching - Tomáš Zeman and Jiří Holeček </div> <div style="width: 48%;"> Fostering ethical reflections on the impact of Information Communication Technologies in a university class - Olatz Ukar Arrien, Galo Bilbao Alberdi, Pedro Manuel Sasia Santos, Iker Pastor López, Diego Casado Mansilla, Borja Sanz Urquijo, and Andoni Eguiluz Morán </div> </div>
09:45-10:00	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Problem-based Learning in a Large-Class Setting - Sathiamoorthy Manoharan, Xinfeng Ye, and Ulrich Speidel </div> <div style="width: 48%;"> Ethics in Engineering Education - Lenka Lhotska </div> </div>
10:00-10:15	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Logic Programming and Reasoning Puzzles - Josef Hynek and Jana Medková </div> <div style="width: 48%;"> Introducing Ethics by IEEE Code of Ethics in International Electrical Power Engineering Education - Jimmy Ehnberg, Sonja Tidblad Lundmark, and Stefan Lundberg </div> </div>
10:15-10:30	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Teaching and Learning Experience: A Student and Teacher Vision - Cristina M.R. Caridade, Teresa Grilo, Verónica Pereira, Ranúzy Neves, and Rui C. Rodrigues </div> <div style="width: 48%; text-align: center;">-</div> </div>
10:30-11:00	Coffee break
11:00	<div style="display: flex; justify-content: space-between;"> <div style="background-color: #0070C0; color: white; padding: 5px;"> TS7A - ISEC Auditorium Topics: Development of innovative materials in engineering education Educational games and simulations </div> <div style="background-color: #808000; color: white; padding: 5px;"> TS7B - Americo Pinto DEE Auditorium Topics: Ethics and deontology Gender and diversity issues </div> </div>
11:00-11:15	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Strengthening Puzzle-based Learning with Individualization - Ulrich Speidel and Sathiamoorthy Manoharan </div> <div style="width: 48%;"> Make a Lab - A Project Focused on the Gender Gap in STEM Fields - Verónica Vasconcelos, Emília Bigotte, Luís Marques, and Ricardo Almeida </div> </div>
11:15-11:30	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> A Chemistry Inclusive and Educational Serious Game - Paula Escudeiro, Nuno Escudeiro, and Márcia Campos Gouveia </div> <div style="width: 48%;"> International Students in Undergraduate Electrical and Information Engineering Programs in the USA - Susan M. Lord, Russell A. Long, Richard A. Layton, Matthew W. Ohland, and Marisa K. Orr </div> </div>
11:30-11:45	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> A Finite Element Based Tool to Support the Understanding of Electromagnetism Concepts - Ângela Ferreira and Bianca Auwarter </div> <div style="width: 48%;"> A gender-focused profile of student applications for Electrical Engineering in Portugal - Fernanda Coutinho and Fátima Monteiro </div> </div>
11:45-12:00	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> An effective modelling approach for simulation of thyristor rectifiers - Rui Chibante and Filipe Carvalho </div> <div style="width: 48%;"> Women in Engineering - Barriers to Participation in the South African Context - Karen S. Garner and Chantelle Y. van Staden </div> </div>
12:15-12:30	EAAEIE Closing ceremony
12:30-14:30	Lunch
14:30-18:30	Guided city walk