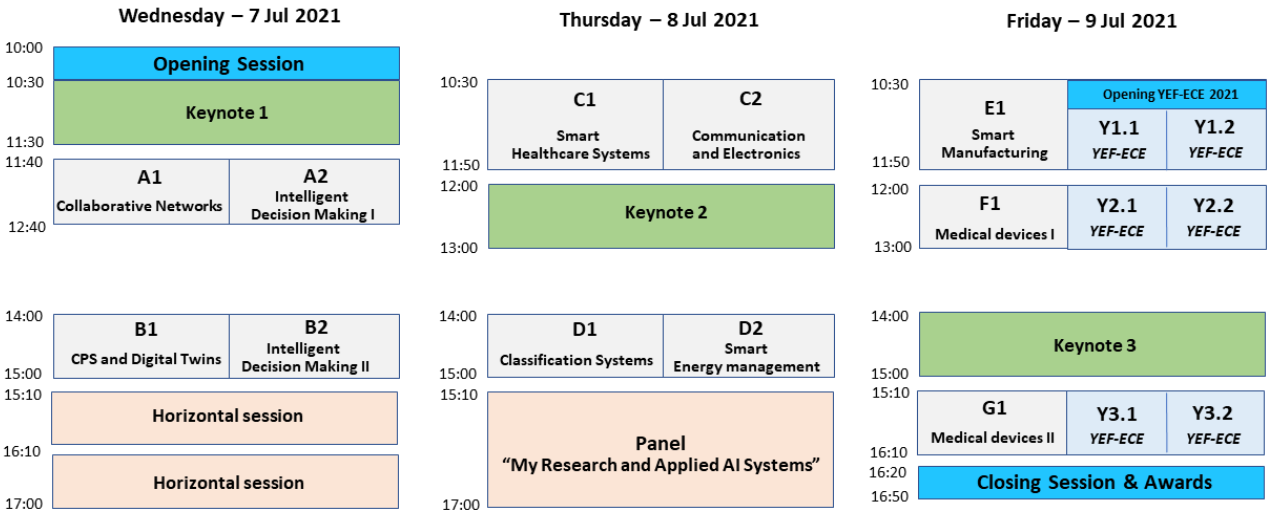
DoCEIS 2021 & YEF-ECE 2021 Program

Lisbon / London time zone



Detailed Schedule YEF-ECE 2021

Friday, July 9, 2021

10:30 – 10:40 Opening Session	YEF-ECE Opening Session
10:40 – 11:50 **Session Y1.1:** Advanced Systems and Services	*Chair: Rodolfo Oliveira*
	A Comparative Study of Microservices Frameworks in IoT Deployments *Shani du Plessis, Bruno Mendes and Noélia Correia*
	Mathematical Model for Early Diagnosis of Diabetes Mellitus *Indira Uvaliyeva and Aigerim Ismukhamedova*
	Agent-based simulation of consumer occupancy distribution in shopping centers *Rui Baptista and Rui Neves-Silva*
	Synoptics of Things (SoT): An Open Framework for the Supervision of IoT Devices *Bruno Serras, Carlos Gonçalves, Tiago Dias and Luís Osório*
Session Y1.2: Control Systems	*Chair: Rui Neves da Silva*
	NOVA.DroneArena: design and control of a low-cost drone testbed *Hugo Cabrita and Bruno Guerreiro*
	Model predictive control strategies for parcel relay manoeuvres using drones *Francisco Matos and Bruno J. Guerreiro*
	The Use of Bézier Curves for Optimal Motion Planning of Autonomous Vehicles *Thomas Berry and António Pascoal*
	Integration of Remote Interfaces for Industrial Automation Applications *Maria da Graça Almeida, Daniel Santiago and Armando Cordeiro*
11:50– 12:00	Break
12:00 – 13:00 **Session Y2.1:** Electronics	*Chair: Luis Oliveira*
	A sub-1V CMOS Instrumentation Amplifier for an AFE Interfacing with Carbon Nanotubes Sensors *Francisco Neves, João Oliveira and Henrique Oliveira*
	A Reconfigurable Switched-Capacitor DC-DC Step-up Converter Integrated in 130 nm CMOS *João Gerhardt, Luís Oliveira and Henrique Oliveira*

	Speed Test and Cluster Analysis Processing Method of Hydraulic Mechanism in High-voltage Circuit-Breakers *Li Wang, Xudong Deng, Liangfeng Guo, Fan Jiang, Jia Chen, Jinsong Xie, Lijiang Chen, Chuan Liu and Xiaojun Yan*
	Analysis and Implementation of a Charge Pump DC-DC Converter *Marta Gameiro, Luís Oliveira and Henrique Oliveiraa*
Session Y2.2: Modelling and Localization	*Chair: José Fonseca*
	Multi-image Super-Resolution Algorithm Supported on Sentinel-2 Satellite Images Geolocation Error *Miguel Vaqueiro, José Manuel Fonseca, André Mora and Henrique Oliveira*
	Flight Control of Hybrid Drones Towards Enabling Parcel Relay Manoeuvres *Bruno Neves and Bruno Guerreiro*
	Sensorless Switched Reluctance Machine and Speed Control: A Study to Remove the Position Encoder at High-speed of Operation *Jonathan V. Costa and Paulo J. C. Branco*

13:00– 14:00	Lunch Break
14:00– 15:00	**Keynote 3** *"Trusting AI: helping AI make the right decisions and fighting the bad bias"* **Milos Manic**
15:00 – 15:10	Break
15:10 – 16:10 **Session Y3.1:** Power electronics	*Chair: João Murta Pina*
	A Multilevel Bidirectional Four-Port DC-DC Converter to Create a DC-Grid in Solid-State Transformers with Hybrid AC/DC Grids *Vitor Monteiro and Joao Afonso*
	A Bidirectional Multilevel DC-DC Converter Applied to a Bipolar DC Grid: Analysis of Operation under Fault Conditions *Cátia F. Oliveira, Vítor Monteiro and João L. Afonso*
	Wireless Power Transfer System Design and Implementation *Pedro Lopes, Pedro Costa and Sónia F. Pinto*
	Simulation analysis of a control system for a Solid-State Transformer *Mário Jorge Marques and Rui Araújo*
Session Y3.2: Systems Modelling and Decision	*Chair: José Barata*
	Constrained-optimization in a 3D bin packing realistic problem *Yamil Mateo Rodriguez, Juan Carlos Dueñas López and Javier Andión Jiménez*
	Online Model Generation for Scalable Predictive Process Monitoring *Pedro Rico, Félix Cuadrado and Juan C. Dueñas*
	A heuristic model to identify organizational collaborative critical success factors *Marco Nunes, Antonio Abreu, Jelena Bagnjuk and Vanessa D'Onofrio*
	Mathematical Modeling of the Interests of Social Network Users *Zhenisgul Rakhmetullina, Raushan Mukhamedova, Roza Mukasheva and Bolat Batyrkhanov*
16:10 – 16:20	Break
16:20– 16:50	**Closing Session & Awards**