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Wednesday, 21 July 2021	
08:30-09:00	<p style="background-color: #008080; color: white; padding: 2px;"><i>Plenary room</i></p> <p>Opening Ceremony</p>
09:00-10:30	<p style="background-color: #008080; color: white; padding: 2px;"><i>Plenary room</i></p> <p>Tutorial 1 - Hands-on Deep Learning for Industrial Applications...N/A Daswin De Silva, Rashmika Nawaratne, and Achini Adikari. Centre for Data Analytics and Cognition, La Trobe University, Victoria, Australia.</p>
10:30-12:00	<p style="background-color: #008080; color: white; padding: 2px;"><i>Plenary room</i></p> <p>Tutorial 2 - Ethics of Artificial Intelligence and Automation for Industrial Applications...N/A Daswin De Silva, Dammindala Alahakoon, and Donna Burnett. Centre for Data Analytics and Cognition, La Trobe University, Victoria, Australia.</p>
12:00-13:00	<p style="background-color: #008080; color: white; padding: 2px;"><i>Plenary room</i></p> <p>Keynote Talk 1 - Universal Automation – the Missing Link for Industry 4.0...N/A John Conway. Business Transformation, Next Gen Automation Incubator, Industry Business, Schneider Electric. Chairs: Valeriy Vyatkin</p>
13:00-16:50	<p style="background-color: #008080; color: white; padding: 2px;"><i>Plenary room</i></p> <p>OPEN SPACE UNCONFERENCE: The future of artificial intelligence – chance or danger? (& Lunch and Breaks at your own discretion) OPEN SPACE DISCUSSION FORUM !</p> <p>This year, with the all the restrictions and limitations around, we are trying something new to bring back what we treasure so much about conferences: direct interaction and the possibility for spontaneous discussions. The agenda of this experiment is to have no pre-set agenda. You – the participants – will create it on the fly. We only suggest a broad theme:</p> <p>The future of artificial intelligence – chance or danger?</p> <p>We are devising systems that become smarter and smarter, and we collecting and analyzing more data than ever. What do we do with it? What can we do with it? What should we be allowed to do with it? Do we still help society and humanity, or will technology ultimately win over common sense? How much control do we want to give artificial intelligence over our energy consumption, our traffic, our lives? Has AI reached a dead end?</p> <p>YOU get to PROPOSE the TOPICS that will be discussed. No stress, no need to deliver a presentation, just an inspiring opportunity to exchange ideas – that’s what open space means. The agenda will be created live by attendees present at the opening session. How can I participate?</p>

Wednesday, 21 July 2021

	Just be there!!
16:50-18:20	<p>Room1</p> <p>TT03 & SS02 - Session 1/4</p> <p>TT03. Safety and security in industrial applications SS02. Tolerant Control, Condition Monitoring and Diagnosis for Industrial Systems Chairs: Jose Antonino-Daviu</p> <p>Fault Detection in Solar PV Systems Using Hypothesis Testing <i>Fouzi Harrou, Bilal Taghezouit, Benamar Bouyeddou...1</i></p> <p>Multifractal Spectrum and Higher Order Statistics for the Detection of Field Winding Faults in Wound Field Synchronous Motors <i>Miguel Enrique Iglesias Martínez, Jose Antonino-Daviu, Carlos A. Platero, Larisa Dunai, J. Alberto Conejero, Pedro Fernández de Córdoba...7</i></p> <p>Fault Classification for Wind Turbine Benchmark Model Based on Hilbert–Huang Transformation and Support Vector Machine Strategies <i>Yichuan Fu, Zhiwei Gao, Aihua Zhang, Xiaoxu Liu...14</i></p> <p>Dual Stationary Frame Control of Inverter-based Resources for Reliable Phase Selection <i>Abdallah Aboelnaga, Maher Azzouz, Mostafa Shaaban...22</i></p>
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13:30-14:30	Plenary room Keynote Talk 2 - Advances in Distributed Computing, Communications and New Paradigms for Industrial Systems...N/A Dave Cavalcanti. Intel Corporation. Chairs: Stefano Vitturi
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	Spatial room Meet Colleagues and Connect with Others
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12:50-13:30	<p>Spatial room</p> <p>Lunch Break</p>
13:30-14:30	<p>Plenary room</p>

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	<p>Keynote Talk 3 - Trusting the AI: Helping AI make the right decisions and fighting the bad bias...N/A Milos Manic. VCU Cybersecurity Center, Virginia Commonwealth University Chairs: Thilo Sauter</p>
14:40-16:10	<p>Plenary room</p> <p>Industry forum - Session 2/2 TITLE: Energy Infrastructure and E-Mobility.</p> <p>- Talk 1. Artificial Intelligence (AI) in Distributed Energy Resource Management Systems (DERMS). Speaker: Nikolaos-Antonios Livanos (EMTECH SPACE, Athens, Greece).</p> <p>- Talk 2. Applications for HIL Testing in EV Charger Development & Validation and their Impact on Faster EV Charger Deployment. Speaker: Friedemann Steinbach (Typhoon HIL, Somerville, USA).</p> <p>- Talk 3. Sustainable Microgrids from a Solution Provider Perspective - Validation Center and Microgrid Controller. Speakers: Marco Cupelli (Rolls-Royce Solution GmbH, Friedrichshafen, Germany), Alexander Bernhard (Rolls-Royce Solution GmbH, Friedrichshafen, Germany). Chairs: Regina Roos, Thomas Strasser</p>
16:20-17:30	<p>Room3</p> <p>TT05 - Session 3/3 TT05. Robotics and mechatronics in industrial applications Chairs: Andrea Bonci, Ya-Jun Pan</p> <p>Cloud Simulation for Continuous Integration and Deployment in Robotics <i>Sérgio Teixeira, Rafael Arrais, Germano Veiga...571</i> Development and Deployment of Complex Robotic Applications using Containerized Infrastructures <i>Pedro Melo, Rafael Arrais, Germano Veiga...579</i> Novelty Detection for Iterative Learning of MIMO Fuzzy Systems <i>Jorge Sampaio Silveira Júnior, Jérôme Mendes, Rui Alexandre Matos Araújo, João Luís Ruivo Carvalho Paulo, Cristiano Premebida...587</i></p> <p>Room4</p> <p>TT12 & TT13 - Session 2/2 TT12. Education in engineering and industrial informatics TT13. Industrial informatics tools Chairs: Bilal Ahmad, Andrei Lobov</p> <p>Overview and Trends for Application of AI Methods for Product Design <i>Brikene Berisha, Andrei Lobov...594</i> Extending design automation by integrating external services for product design <i>Liang Zhang, Andrei Lobov...602</i> Using In-Browser Augmented Reality to Promote Knowledge-Based Engineering throughout the Product Life Cycle <i>Anna Florea, Andrei Lobov, Tatiana Minav...608</i></p> <p>Room1</p>

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	<p>TT14 - Session 2/2 TT14. Intelligent finance Chairs: Jianwu Lin, Heping Pan</p> <p>A Predicting Model For Accounting Fraud Based On Ensemble Learning <i>Yunchuan Sun, Zixiu Ma, Xiaoping Zeng, Yao Guo...616</i> Explainable Machine Learning for Improving Logistic Regression Models <i>Yimin Yang, Min Wu...621</i> Blockchain Based Global Financial Service Platform <i>Mingyang Zhang, Yingjun Li, Chonghe Zheng, Xu Han, Haisong Gu, Heping Pan...627</i></p>
	<p>Room2</p> <p>TT04 - Session 2/2 TT04. System and software engineering, runtime intelligence Chairs: Herbert Prähofer</p> <p>Utilizing an Enterprise Architecture Framework for Model-Based Industrial Systems Engineering <i>Christoph Binder, Werner Leitner, Oliver Jöbstl, Lukas Mair, Christian Neureiter...633</i> Integration of a formal specification approach into CPPS engineering workflow for machinery validation <i>Birgit Vogel-Heuser, Christoph Huber, Suhyun Cha, Bernhard Beckert...639</i> Reuse Assessment of IEC 61131-3 Control Software Modules Using Metrics – An Industrial Case Study <i>Juliane Fischer, Birgit Vogel-Heuser, Christoph Huber, Markus Felger, Matthias Bengel...647</i></p>
17:30-18:10	<p>Spatial room</p> <p>Feedback & Looking towards the Future</p>
18:10-18:30	<p>Plenary room</p> <p>Awards ceremony & Wrap up</p>