Vertical and Topical Tracks Program

San Francisco	New York	Aveiro	Rome	New Delhi	Beijing
00:30h-02:30h PDST	03:30h-05:30h EDST	08:30h-10:30h WEDST	09:30h-11:30h CEST	13:00h-15:00h IST	15:30h-17:30h CST
03:00h-05:00h PDST	06:00h-08:00h EDST	11:00h-13:00h WEDST	12:00h-14:00h CEST	17:30h-19:30h IST	20:00h-22:00h CST
06:00h-08:00h PDST	09:00h-11:00h EDT	14:00h-16:00h WEDST	15:00h-17:00h CEST	20:30h-22:30h IST	23:00h-01:00h CST (Next Day)
08:00h-10:00h PDST	11:30h-13:30h EDST	16:00h-18:00h WEDST	17:00h-19:00h CEST	22:30h-00:30h IST (Next Day)	01:00h-03:00h CST (Next Day)

(WEDST – Western European Daylight Savings Time, Local Time in Aveiro)

Key to Vertical and Topical Tracks (details)

Special Sessions	Subject	Workshops	Subject
Vert-01	Space	Topi-01	Sensors and Devices
Vert-02	Maritime	Торі-02	Communications and Networking
Vert-03	Agriculture and Aquaculture	Topi-03	Security, Privacy, and Trust
Vert-04	Smart Cities and Mobility	Topi-04	Artificial Intelligence and Machine Learning
Vert-05	Energy, Built Environment, and Sustainability	Topi-05	Computing and Data Processing
Vert-06	Industry and Manufacturing		

	Vertical and Topical Track Program Chairs			
	 Damir Filipovic, Alliance for IoT and Edge Computing Innovation (AOTI), Brussels, Belgium Heiner Stüttgen, IEEE Communications Society & NEC Laboratories Europe (retired), Heidelberg, Germany 			
Vert-03	" <u>Agriculture and Aquaculture</u> "			

	Chairs	 Luis Pérez-Freire, Gradiant, Universidade de Vigo, Vigo, Galicia, Spain Mehmet Can Vuran, University of Nebraska-Lincoln, Lincoln, Nebraska, USA Stefano Giordano, University of Pisa, Pisa, Italy
	Vert-03 - Session 1	Session 1: "Data and communications."
		Moderator: Luis Pérez-Freire, Gradiant, Vigo, Spain
	Monday October 23rd 14:00-16:00 WEDST Virtual	<i>Talk 1 (Presentation 1490): "An agriculture data space proof of concept based on data sovereignty by design.", Roberto García, Universitat de Lleida, Lleida, Spain.</i>
		Talk 2 (Presentation): "Emerging data spaces: navigating the data jungle.", Jurgen Vangeyte, ILVO, Merelbeke, Belgium.
		<i>Talk 3 (Presentation 1498): "Federated data architecture for genetic enhancement in sheep selection.", Diego Reiriz Cores, Gradiant, Vigo, Spain.</i>
		<i>Talk 4 (Presentation 1528): "The need of 6G and IoT for agriculture.",</i> Abishek Shrivastav , <i>John Deere, Kaiserslautern, Germany.</i>
	Vert-03 - Session 2	Session 2: "Environment and sustainability."
		Moderator: Luis Pérez-Freire, Gradiant, Vigo, Spain
	Tuesday October 24th 14:00-16:00 WEDST Virtual	Talk 1 (Presentation 1513): "Biodiversity and IoT Technologies: challenges and opportunities for monitoring technologies to save the environment.", Christopher Brewster, TNO, Soesterberg, Netherlands.
		Talk 2: (Presentation 1530): "The role of IoT and digital agricultural technologies for the design and monitoring of sustainable agricultural policies.", Nikos Kalatzis, Neuropublic, Piraeus, Greece.
		<i>Talk 3 (Presentation 1454): "Use of high-precision GNSS receivers in precision farming applications.",</i> Artur Krukowski, RFSAT, Dublin, Ireland.
	Vert-03 - Session 3	Session 3: "Greenhouse Technologies."
		Moderator: Stefano Giordano, University of Pisa, Pisa, Italy
	Wednesday October 25th 14:00-16:00 WEDST Virtual	Talk 1 (Presentation 1423): "A Decision Support System for increasing the sustainability of the tomato greenhouse crops: first results of the iGUESS-MED project.", Luca Introcci, University of Pisa, Pisa, Italy.

		 Talk 2 (Presentation 1442): "Agrisense: a vertical platform for real time crop sensing and remote control.", Antonio Manes, NETSENS, Florence Italy. Talk 3 (Presentation 1427): "Let the Plants do the Talking: Smart Agriculture by the messages received from Plants and Soil.", Danilo Demarchi, Polytechnic of Turin, Turin, Italy.
	Vert-03 - Session 4	Session 4: "Animal IoT"
		Moderator: Mehmet Can Vuran, University of Nebraska-Lincoln, Lincoln, Nebraska, USA
	Thursday October 26th 14:00-16:00 WEDST Virtual	 Talk 1 (Presentation 1486): "Advancements in AI and IoT: A Catalyst for Transforming Animal Science and Promoting Sustainable.", Joseph Walsh, Institute of Technology, Tralee (ITT), Tralee, Ireland Talk 2 (Presentation 1529): "Sensor Systems for Management of Livestock.", Tami Brown-Brandl, University of Nebraska-Lincoln (UNL), Lincoln, Nebraska, USA.
		<i>Talk 3 (Presentation 1506): "Smart Livestock Farming in Extensive Conditions Enabled by IoT.", Julian Oreggioni, Universidad de la República, Montevideo, Uruguay.</i>
	Vert-03 - Session 5	Session 5: "Ag-IoT - Systems Perspective"
		Moderator: Mehmet Can Vuran, University of Nebraska-Lincoln, Lincoln, Nebraska, USA
	Friday October 27th 14:00-16:00 WEDST Virtual	<i>Talk 1 (Presentation 1458): "SmartFarm: IoT Systems That Simplify and</i> <i>Automate Agriculture Analytics.</i> ", Chandra Krintz, University of California at Santa Barbara, Santa Barbara, California.
		<i>Talk 2 (Presentation 1504): "The Next Horizon of IoT Systems for Rural and Remote Access: Challenges and Solutions.", Janise McNair, Department of Electrical and Computer Engineering, University of Florida, Gainesville, Florida, USA.</i>
		Talk 3 (Presentation 1485): "Advances in Irrigation Technology for Efficient, Sustainable Food Production: An Industry Perspective.", John Kastl, Vice President, Product Development at Valmont Industries Inc., Valley, Nebraska, USA.