## **Vertical and Topical Tracks Program**

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

San Francisco	New York	Aviero	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)

## Key to Vertical and Topical Tracks (details)

Special Sessions	Subject	Workshops	Subject
Vert-01	Space	Topi-01	Sensors and Devices
Vert-02	Maritime	Topi-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, Power, and Sustainability	Topi-05	Computing and Data Processing
Vert-06	Industry and Manufacturing		

	<ul> <li>Vertical and Topical Track Program Chairs</li> <li>Damir Filipovic, Alliance for IoT and Edge Computing Innovation (AOTI), Brussels, Belgium</li> <li>Heiner Stüttgen, IEEE Communications Society &amp; NEC Laboratories Europe (retired), Heidelberg, Germany</li> </ul>
Topi-05	"Computing and Data Processing"

Chairs	<ul> <li>João Carlos Ferreira, ISCTE, Lisbon, Portugal</li> <li>Tao Zhang, NIST, Gaithersburg, Maryland, USA</li> <li>Preeti Chauhan, Google, Redwood City, California, USA</li> </ul>
Tuesday October 17th 11:00-13:00 WEDST Hybrid (In person in Aveiro and Virtual Live Online)	Moderator: João Carlos Ferreira, ISCTE, Lisbon, Portugal  Talk 1: "Internet of Robotic Things: Architecture, Examples, and Future Wareabouts.", Anand Nayyar, Duy Tan University, Da Nang, Vietnam.  Talk 2: "DIVINE: An Agriculture Data Spaces Ecosystem", Soumya Kanti Datta, Digiotouch, Tallinn, Estonia.  Talk 3: "Energy Savings in Smart Buildings", Bruno Miguel Gonçalves Mataloto, Instituto Universitár io de Lisboa, Lisbon, Portugal.  Talk 4: "An on-farm experimentation IoT infrastructure for urban farmers.", Sejun Song, University of Missouri, Kansas City, Missouri, USA.  Talk 5: "REDLedger - REdactable Distributed Ledger", Joanna DeFranco, Secure Systems and Applications Group, NIST, Gaithersburg, Maryland, USA.
Topi-05 - Session 2  Wednesday October 25th 16:00-18:00 WEDST Virtual	Session 2: "Edge Computing and Edge AI."  Moderator: Tao Zhang, NIST, Gaithersburg, Maryland, USA  Talk 1: "Integrating Blockchain Technology and Federated Learning: Enhancing Privacy and Trust in Decentralized Machine Learning.", Rajesh Hegde, IIT Kanpur, Kanpur, Uttar Pradesh, India  Talk 2: "Enhanced Federated Learning with Server Learning: Benefits and Limitations.", Richard J. La, University of Maryland, College Park, Maryland, USA.  Talk 3: "Applied Cases of IoT project between a University and Industry.", Joao Carlos Ferreira, ISCTE-IUL and INOV, Instituto Universitário de Lisboa, Lisbon, Portugal.  Talk 4: "From Edge Computing to Edge AI.", Tao Zhang, NIST, Gaithersburg, Maryland, USA.
Topi-05 - Session 3	Session 3: "2.5/3D Packaging and Hardware for Cloud Computing."

Wednesday October 18th 16:30-18:30 WEDST Hybrid (In person in Aveiro and Virtual Live Online)	Moderator: Preeti Chauhan, Google, Redwood City, California, USA  Talk 1: "EMIB and substrate technologies", Gang Duan, INTEL, Chandler, Arizona, USA.  Talk 2: "GPU and Memory Packaging Technologies for Cloud Computing", Amr Helmy, University of Toronto, Toronto, Ontario, Canada.  Talk 3: "Packaging Innovations for AI/ML", Preeti Chauhan, Google, Redwood City, California, USA.  Talk 4: "Overview of 2.5D/3D Advanced Package Technologies", Jason Zhang, Intel, Chandler, Arizona, USA.
Topi-05 - Session 4  Wednesday October 25th 14:00-16:00 WEDST Virtual	Moderators: Tao Zhang, NIST, Gaithersburg, Maryland, USA, and João Carlos Ferreira, ISCTE, Lisbon, Portugal  Talk 1: "Human Sensing, Processing and Networking for 3D Remote Communication.", Hirozumi Yamaguchi, Osaka University, Osaka, Japan.  Talk 2: "The Integration of Internet of Things (IoT) and Machine Learning (ML): An Essential Component in Experimental Testbeds", Abdellah Chehri, Royal Military College of Canada, Ottawa, Canada.  Talk 3: "How access networks assure reliable networking for edge and embedded compute", Jason Rupe, Cablelabs, Boulder, Colorado, USA  Talk 4: "Networking for Cloud computing", Roger Garcia, Sr. TPM- Manager Datacenter Quality & NPI, Santa Cruz, California, USA
Topi-05 - Session 5  Thursday October 26th 16:00-18:00 WEDST Virtual	Session 5: "Embedded Computing."  Moderator: Preeti Chauhan, Google, Redwood City, California, USA  Talk 1: "Intelligent Agents on IoT Systems", Moharram Challenger, University of Antwerp, Antwerp, Belgium.  Talk 2: "Hybrid Quantum-Classical AI Engineering on the IoT Cloud and Edge", Armin Moin, University of Colorado Colorado Springs, Colorado, USA.

	Talk 3: "Where's the Edge? – APIs to simplify access to edge resources", Randy Levensalor, Cablelabs, Boulder, Colorado, USA.