Workshops Program

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

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

Work-01	***"1st International Workshop on Decentralized Physical Infrastructure Networks (DePIN 2023)"***

Organizers	• **Xinxin Fan** – IoTeX, Menlo Park, California, USA • **Lei Xu** - Kent State University, Kent, Ohio, USA

Work-01- Session 1 **Friday October 27 14:00-16:00 WEDST Virtual**		*Session 1: "DePIN & Tokenomics"* *Welcome Address* *Keynote 1: "DePIN Legos: Why Composability Will Definethe Next Decade of Infrastructure",* Salvador Gala, Escape Velocity, New York, NY, USA
	1348	*Talk 1: "A Taxonomy for Blockchain-based Decentralized Physical Infrastructure Networks (DePIN)."*, Mark Christopher Ballandies[1], Hongyang Wang[1], Andrew Chung Chee Law[2], Joshua Chu-Yue Yang[1], Christophe Gösken[1], Michael Andrew[3]; (1) ETH Zurich, Zurich, Switzerland; (2) IoTeX, Menlo Park, California; and (3) Who Loves Burrito? (https://wholovesburrito.com/).
	1400	*Talk 2: "Burn-and-Mint Tokenomics: Deflation and Strategic Incentives."*, Uroš Kalabić[1], Mark Christopher Ballandies[2], Krzysztof Paruch[3], Heinrich H. Nax[4], and Thomas Nigg[1]; (1) Oncoy Association, Zug, Switzerland, (2) ETH Zurich, Zurich, Switzerland, (3) Vienna University of Economics and Business, Vienna, Austria, (4) University of Zurich, Zurich, Switzerland.

	Work-01- Session 2 **Friday October 27** **16:00-18:00 WEDST** **Virtual**		***Session 2: "Scalability, Identity & Privacy"*** ***Keynote2: "Towards a Rollup-Centric Scalable Architecture for DePIN"***, Xinxin Fan, IoTeX, Menlo Park, CA, USA
		1323	***Talk 3: "Combining Verifiable Credentials and Blockchain Tokens for Traceable and Offline Token Operations.",*** Srivatsav Chenna, and Christian Prehofer; Denso Automotive Deutschland GmbH, Eching, Germany.
		1370	***Talk 4: "Privacy-Preserving Ownership Transfer: Challenges and An Outlined Solution Based on Zero-Knowledge Proofs."***, Mohammadtaghi Badakhshan, and Guang Gong; University of Waterloo, Waterloo, Ontario, Canada. ***Closing Remarks***
Work-02	***"[2nd Workshop on Convergence of Edge Intelligence in IoT (EdgeAI-IoT 2023)](#)"***		
	Organizers		• **Christos Anagnostopoulos** - University of Glasgow, Glasgow, Scotland, UK • **Shameem Puthiya Parambath** - University of Glasgow, Glasgow, Scotland, UK • **Fani Deligianni** - University of Glasgow, Glasgow, Scotland, UK
	Work-02 - Session 1 **Wednesday October 19th** **16:30-18:30 WEDST** **Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 6**		***Session 1: "Convergence of Edge Intelligence in IoT"***
		1258	***Talk 1:"RL-based Computation Offloading Scheme for Improving QoE in Edge Computing Environments***.", Jinho Park, and Kwangsue Chung; Kwangwoon University, Seoul, Korea.
		1314	***Talk 2: "Edge NLP for Efficient Machine Translation in Low Connectivity Areas."***, Tess Watt, Christos Chrysoulas, and Dimitra Gkatzia; Edinburgh Napier University, Edinburgh, Scotland, UK.
		1407	***Talk 3: "A Federated Learning Approach for Continuous User Identification."***, Rafael Veiga[1], Rodrigo Flexa[1], Lucas Bastos[1], Iago Medeiros[1], Denis Rosário[1], Eduardo Cerqueira[1], Sherali Zeadally[2], and Leandro Villas[3]; (1) Federal University of Pará, Belem, Brazil; (2) University of Kentucky, Lexington, Kentucky, USA; and (3) State University of Campinas, Campinas, Brazil.
Work-03			

	"*1st Workshop on 5G and machine learning for IoT and unmanned aerial vehicles (UAV)*"		
	Organizers		• **Henry Leung** - University of Calgary, Calgary, Alberta, Canada • **Nan Xie** - University of Calgary, Calgary, Alberta, Canada
	Work**-03** - Session 1 **Thursday October 19th 11:00-13:00 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 6**		*Session 1: "Machine Learning for IoT and Unmanned Aerial Vehicles"* *Keynote 1: "Modernizing the tactical communications for the Canadian Army: the way forward.",* Aymann Sabbah; Deference Research and Development, Ottawa, Ontario, Canada.
		1437	*Talk 1: "Enabling Cooperative Awareness for Miniature UAVs with BLE5: Range Analysis and Experimental Measurement.",* Sandaruwan Gayantha Jayaweera, Konstantin Mikhaylov, and Matti Hamalainen; University of Oulu, Oulu, Finland.
		1161	*Talk 2: "Latency Minimization for Multi-UAV Aided Mobile Edge Computing.",* Ahmed A. Al-habob[1], Jianqiang Lin[2], Octavia A. Dobre[1], and Yindi Jing[2]; (1) (Memorial University of Newfoundland; St. John's, Newfoundland, Canada; and (2) University of Alberta, Edmonton, Alberta, Canada.
		1419	*Talk 3: "Robust Stabilization Of A Quadrotor as A 5G Access Point Using Acceleration Feedback.",* Longhao Qian, and Hugh H.T. Liu; University of Toronto, Toronto, Ontario, Canada.
		1339	*Talk 4:* **"A Deep Learning Approach for a QoS Prediction System in Cellular Networks",** Ali Adib Arnab[1], Ali Abir Shuvro[2], King Ma[1], and Henry Leung[1]; (1) University of Calgary, Calgary, Alberta, Canada; and (2) Islamic University of Technology, Gazipur, Bangladesh.
		1340	*Talk 5: "Comparison of 4G LTE and 5G NR in UAV Networks: A Simu5G-Based Performance Evaluation.",* Ali Adib Arnab[1], King Ma[1], Ali Abir Shuvro[2], Henry Leung[1]; (1) University of Calgary, Calgary, Alberta, Canada; and (2) Islamic University of Technology, Gazipur, Bangladesh.
	Work-03 - Session 2 **Thursday October 19th**		*Session 2: "Machine Learning for IoT and Unmanned Aerial Vehicles"* *Keynote 2: "Cell-Free Integrated Aerial-Terrestrial Networks for IoT Communications.",* Ekram Hossain; University of Manitoba, Winnipeg, Manitoba, Canada.

	16:30-17:30 WEDST Hybrid (In Person in Aveiro and Virtual Live Online) **Room 6**	*1283*	*Keynote 3: "IRS-assisted communications: Channel training and performance analysis.",* Yindi Jing; University of Alberta, Edmonton, Alberta, Canada. *Talk 6: "Joint Optimization of UAV Trajectory and User Scheduling in Intelligent Reflecting Surface-Aided Systems with Interfering Nodes."* Jianqiang Lin[1], Ahmed Abdullah Al-Habob[2], Yindi Jing[1], Octavia), A. Dobre[2]; (1) University of Alberta; and (2) Memorial University of Newfoundland, St. John's, Newfoundland, Canada.
Work-04	*"1st Workshop on Internet of Things Identification Technology"*		
	Organizers		• **Chi Cheng**, China Academy of Information and Communications Technology (CAICT), Beijing, China • **Yin Zhihang**, China Academy of Information and Communications Technology(CAICT), Beijing, China
	Work-04 - Session 1 **Monday October 16th 11:00-13:00 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 6**	 *1342* *1371*	*Session 1: "Internet of Things Identification Technology"* *Keynote: "Development of New Network Identification System",* Yin Zhihang, and Chi Cheng; China Academy of Information and Communications Technology (CAICT), Beijing, China. *Talk 1: "Reliable Identification of IoT Devices from Passive Network Traffic Analysis: Requirements and Recommendations.",* Ash Andrews[1], George Oikonomou[1], Simon Armour[1], Paul Thomas[1], Thomas Cattermole[2]; (1) University of Bristol, Bristol, UK; and (2) University College London, London, UK. *Talk 2: "Extended Topic Trees for Flexible Subscriptions with MQTT.",* Tobias Christian Piller, Maximilian Klotz, and Abdelmajid Khelil; Landshut University of Applied Sciences, Landshut, Germany.
Work-05	*"2nd International Workshop on the Internet of Time-Critical Things (IoTime 2023)"*		
	Organizers		• Ivan Zyrianoff - University of Bologna, Bologna, Italy • Carlos, Kamienski - Federal University of ABC, Santo André, Brazil • Dave Cavalcanti - Intel Corporation, Hillsboro, Oregon, USA • Daniel Batista - University of Sao Paulo, San Paulo, Brazil • Antonio Virdis - University of Pisa, Pisa, Italy

		• Lorenzo Gigli - University of Bologna, Bologna, Italy
Work-05 - Session 1 **Tuesday October 17th 08:30-10:30 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 6**		*Session 1: "Internet of Time-Critical Things"* *Keynote: "Digital aspects in I4.0 – The verticals are calling",* Daniel Corujo, University of Aveiro, Portugal
Work-05 - Session 2 **Tuesday October 17th 11:00-13:00 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 6**		*Session 2: "Internet of Time-Critical Things"* *Opening Remarks*
	1364	*Talk 1: "A BLE Mesh Edge Framework for QoS-aware IoT Monitoring Systems.",* Leonardo Montecchiari1, Angelo Trotta2 Ivan Zyrianoff2, Luciano Bononi2, Enrico Natalizio1, and Marco Di Felice2; (1) Technology Innovation Institute (TII), Abu Dhabi, UAE; and (2) University of Bologna, Bologna, Italy.
	1276	*Talk 2: "Flexible Automated Optical Inspection Architecture for Industry 4.0.",* Filippo Morselli[1], Luca Bedogni[2] Emilia Michele Fantoni[1], Umberto Mirani[1,3]; (1) Digibelt Srl, Bologna, Italy; (2) University of Modena and Reggio, Modena, Italy; and (3) Bonfiglioli Consulting, Bologna, Italy.
	1318	*Talk 3: "QL-TSCH-plus : A Q-learning Distributed Scheduling Algorithm for TSCH Networks.",* Mehdi Kherbache, Moufida Maimour, and Eric Rondeau; CRAN Laboratory, Universit´e de Lorraine, Nancy, France.
	1302	*Talk 4: "Time-Sensitive Airborne Fog Computing as a Named Serverless Microservices Framework*.", Antonio Silva[1], Paulo Mendes[2], Denis Rosario[3], Eduardo Cerqueira[3], and Edison Freitas[1]; (1) Federal University of Rio Grande do Sul, Porto Alegre, Brazil; (2) Airbus, Taufkirchen, Germany; and (3) Federal University of Para (UFPA), Belem, Brazil.
	1308	*Talk 5: "Wireless TSN Extension to Enable Deterministic Connectivity: Implementation and Performance Evaluation.",* Mohamed Ali Mohamed Seliem, Ahmed Zahran, Dirk Pesch, University College Cork, Cork, Ireland
Work-06	*"1st Workshop on Backscatter Communication Security in Internet of Things Environment"*	

	Organizers		• **Masoud Kaveh**, Aalto University, Espoo, Finland • **Li Zhao**, Xidian University, Xi'an, Shaanxi, China, • **Zheng Yan,** Xidian University, Xi'an, Shaanxi, China, • **Riku Jäntti**, Aalto University, Espoo, Finland
	Work-06 - Session 1 **Wednesday October 18th 08:30-10:30 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 6**		*Session 1: "Backscatter Communications Security in IoT Environment"*
		1287	*Talk 1: "A Survey on AI-Enabled Attacks and AI-Empowered Countermeasures in Physical Layer*.", Jingdong Chang[1], Zhao Li[1], Masoud Kaveh[2], Yifan Zhang[2], Jiajun Li[1], and Zheng Yan[1]; (1) School of Cyber Engineering, Xidian University, Xi'an, Shaanxi, China; (2) Aalto University, Espoo, Finland.
		1150	*Talk 2: "AmBC-aided Interference Sensing and Estimation.",* Lijuan Zhang[1], Zhao Li, Xiujuan Liang[1], Chengyu Liu[1], and Jia Liu[2]; (1) School of Cyber Engineering, Xidian University, Xi'an, Shaanxi, China; and (2) National Institute of Informatics, Chiyoda, Tokyo, Japan.
		1294	*Talk 3: "Feature Compression based BP Neural Network for IoT Performance Prediction.",* Ziru Zhao[1], Yanhong Xu[1], Zhao Li[1], Zhixian Chang[2], and Jia Liu[3]; (1) School of Cyber Engineering, Xidian University, Xi'an, Shaanxi, China; (2) Xi'an University of Posts and Telecommunications, Xi'an, Shaanxi, China; and (3) National Institute of Informatics, Chiyoda, Tokyo, Japan.
		1284	*Talk 4: "Secure Wireless Powered Communications under Fisher-Snedecor F Fading Channels*.", Farshad Rostami Ghad[1], Masoud Kaveh[2], Zheng Yan[3], and Riku Jäntti[2]; (1) Universidad de Málaga, Málaga, Spain; (2) Aalto University, Espoo, Finland; (3) School of Cyber Engineering, Xidian University, Xi'an, Shaanxi, China.
	Work-06 - Session 2 **Wednesday October 18th 11:00-13:00 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 6**		*Session 2: "Backscatter Communications Security in IoT Environment"*
		1439	*Talk 5: "Carrier Frequency Offset and Channel Estimation for Passive Backscatter Communication Systems.",* YatingXu[1], RongtaoXu[2], JiancunHu[3], Marjan Milošević [4], GongpuWang[1], and Bo Ai[2]; (1) School of Computer and Information Technology, Beijing Jiaotong University, Beijing, China; (2) School of Electronic and Information Engineering, Beijing Jiaotong University, Beijing, China; (3) China Mobile Information Technology Company Ltd, Beijing, China, (4) Faculty of Technical Sciences, University of Kragujevac, Čačak, Serbia.
		1384	

			Talk 6: "Physical Layer Security in a Private 5G Network for Industrial Application.", Shivraj Hanumant Gonde[1], Christoph Frisch[2], Dominic Schupke[1], Svetoslav Duhovnikov[1], Thomas Meyerhoff[1], and Martin Kubisch[1]; (1) Airbus, Munich, Germany; and (2) Technische Universität München, Munich, Germany. ***Keynote 1: "Secure Wireless Powered Backscatter Communication for Internet-of-Things",*** Kai Zeng, George Mason University, FairFax, Virginia, USA
Work-08	***"[1st Workshop on Next-gen Decentralized Dependable Intelligent and Connected IoT: Challenges and Opportunities](#)"***		
	Organizers		• Hao Xu, Huawei Technologies • Bin Cao - Beijing University of Posts and Telecommunications • Qi Sun - China Mobile Research Institute • Chong Lou - Huawei Technologies • Paulo Klaine - Ericsson K. K. Japan
	Work-08 - Session 1 **Thursday October 19th 16:30-17:30 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 3**		***Session 1: "Decentralized Dependable Intelligent and Connected IoT"*** ***Panel: "Transformation Towards Decentralized IoT Infrastructure"*** Dr Xiaoshuai Zhang, QMUL and University of Glasgow (moderator) Prof. Yan Zhang Elected member of Academia Europaea, Oslo University Prof. Erwu Liu, Tongji University Dr. Chen Sun, Sony Dr. Yao Sun, University of Glasgow Dr. Hao Xu, Huawei Salvador Gala, Co-founder of Escape Velocity Ventures (ev3*)*
	Work-08 - Session 2 **Friday October 20th 11:00-13:00 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 3**		***Session 2: "Decentralized Dependable Intelligent and Connected IoT"*** ***Keynote 1: "Blockchain for Trust in IoT: Challenges and Opportunities",*** Bin Cao, Beijing University of posts and Telecommunications, Beijing, China ***Keynote 2: "Deep in the DePIN",*** Chen Sun, Sony, Beijing, China

			Keynote 3: "Blockchain based Spectrum Sharing for Smart City", Hao Xu, Huawei Technologies, Beijing, China
	Work-08 - Session 3 **Friday October 20th 16:30-18:30 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 3**		***Session 3: "Decentralized Dependable Intelligent and Connected IoT"***
		1398	***Talk 1: "A Review of Gaps between Web 4.0 and Web 3.0 Intelligent Network Infrastructure.",*** Zihan Zhou[1], Zihao Li[1], Xiaoshuai Zhang[1], Yunqing Sun[2], and Hao Xu[3]; (1) University of Glasgow, Glasgow, Scotland, UK; (2) Northwestern University, Evanston, Illinois, USA; and (3) Shanghai Engineering Research Center for Blockchain Applications and Services, Shanghai, China.
		1399	***Talk 2: "BE-DNS: Blockchain-enabled Decentralized Name Services and P2P Communication Protocol.",*** Zihan Zhou[1], Chenxiao Guo[1], Hao Xu[2], Xiaoshuai Zhang[1], Yixuan Fan[1], and Lei Zhang[1]; (1) University of Glasgow, Glasgow, Scotland, UK; and (2) Shanghai Engineering Research Center for Blockchain Applications and Services, Shanghai, China.
		1322	***Talk 3: "Intelligent Beam Management for Millimeter-Wave Cellular Networks in IoT systems.",*** Ruiyu Wang, Zhongxu Dong, Yusuf Sambo, Yao Sun, Lei Zhang, Muhammad Imran; University of Glasgow, Glasgow, Scotland, UK
		1299	***Talk 4: "Proof of Traffic: An Incentive Mechanism for Traffic Sharing in Decentralized Wireless Networks.",*** Sungmin Choi, Yongqi Wu, Guining Liu, Zhuochen Xie, Shengnan Zhang, and Xingjun Wang; Shenzhen International Graduate School, Tsinghua University, Nanshan, Shenzhen, China.
Work-09	***[1st IEEE Workshop on Advancements in Metaverse and IoT](#)***		
	Organizers		• Zhi Liu, The University of Electro-Communications, Tokyo, Japan • Liang Zhao, Shenyang Aerospace University, Shenyang, China • Yuanlong Cao, Jiangxi Normal University, Nanchang, China • Wei Zhao, Anhui University of Technology, Maanshan, Anhui, China
	Work-09 - Session 1 **Friday October 20th**		***Session 1: "Metaverse and IoT"*** ***Chair:*** **Yuanlong Cao**, Jiangxi Normal University, Nanchang, China

	08:30-10:30 WEDST Hybrid (In Person in Aveiro and Virtual Live Online) **Room 6**	*1269* *1321* *1331*	***Keynote 1: "Towards Cyber Secure Connected Vehicles and Enabling Services",*** Yue Cao, Wuhan University, Wuhan, China ***Keynote 2: "Multi-Agent Reinforcement Learning for Dynamic Topology Optimization of Mesh Wireless Networks",*** Wei Sun, Hefei University of Technology, Hefei, Anhui, China ***Talk 1: "Internet of Things and Augmented Reality in Cultural Industry: Enhancing Engagement and Participation.",*** Jinquan Nie[1], Yuanlong Cao[1], Tao Xu[2] Yijing Ji[3], Mingjing Gu[3], Xiaowen Zhu[3], Yijie Cheng4, and Yirui Jiang[3]; (1) Jiangxi Normal University, Nanchang, China; (2) Tongji University, Shanghai; (3) Cranfield University, Bedfordshire, UK; (4) Shanghai Jiaotong University, Shanghai, China. ***Talk 2: "Data Incremental Clustering Algorithm based on Differential Privacy.",*** Qing Gao, Xiujun Wang, Yan Gao, and Tao Tao; Anhui University of Technology, Maanshan, Anhui, China. ***Talk 3: "Edge Computing and Caching Optimization based on PPO for Task Offloading in RSU-assisted IoV.",*** Wei Zhao, Cheng Wu, Runhu Zhong, Ke Shi, and Xinwei Xu; Anhui University of Technology, Maanshan, Anhui, China
	Work-09 - Session 2 **Friday October 20th 11:00-13:00 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 6**	*1142* *1193* *1366*	***Session 1: "Metaverse and IoT"*** ***Chair: Wei Zhao***, Wei Zhao, Anhui University of Technology, Maanshan, Anhui, China ***Talk 4: "QUIC Performance Evaluation: From the Perspective of Internet Competing Traffic.",*** Yuehua Fan, Jinquan Nie, Zhiming Zhang, Liang Shan, and Junyi Wu; Jiangxi Normal University, Nanchang, Jiangxi, China. ***Talk 5: "Bridging the Gap: Leveraging QUIC Protocol for Improving Network Simulation on NS-3.",*** Xinyi Li, Ruixu Zhang, and Jiahui Huang; School of Information Engineering, Jingdezhen Ceramic University, Jingdezhen, China. ***Talk 6: "Design and Implementation of a Low-Cost Virtual Biking System Using IoT Interface.",*** Teyi Tsai, and Joseph Finkelstein; Department of Biomedical Informatics, University of Utah, Salt Lake City, Utah, USA
Work-11	*"1st Workshop on integrating MTC and Satellites - Sat-IoT"*		

	Organizers		• **Hirley Alves**, University of Oulu, Oulu, Finland • **Konstantin Mikhaylov**, University of Oulu, Oulu, Finland • **Marko Höyhtyä**, VTT Technical Research Centre of Finland, Espoo, Finland
	Work-11 - Session 1 **Thursday October 19th 08:30-10:30 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 3**		*Session 1: "Mobile Telecommunications and Satellites"* *Opening Remarks* *Keynote 1: "Towards IoT Connectivity Anywhere in the World"*, Mohamed-Slim Alouini, King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia. *Keynote 2: "Meeting the Stars: Integrating IoT with Satellite Communications",* Emre Yavuz, Ericsson, Stockholm, Sweden
		1266	*Talk 1: "A Technical Comparison of Six Satellite Systems: Suitability for Direct-to-Device Satellite Access.",* Sandrine Boumard[1], Ilkka Moilanen[2], Mika Lasanen[2], Tapio Suihko[2], and Marko Höyhtyä[2]; (1) Nokia, Espoo, Finland; and (2) VTT Technical Research Centre of Finland Ltd., Espoo, Finland.
		1352	*Talk 2: "An Overview of Direct-to-Satellite IoT: Opportunities and Open Challenges.",* Muhammad Asad Ullah[1,2], Konstantin Mikhaylov[1], Hirley Alves[1]; (1) University of Oulu, Oulu, Finland; and (2) VTT Technical Research Centre of Finland Ltd., Espoo, Finland.
		1406	*Talk 3: "Direct-to-Satellite Connectivity for IoT: Overview and Potential of Reduced Capability (RedCap).",* Champaka Damuddara Gedara[1], Muhammad Danyal Khattak[1], Muhammad Asad Ullah[1,2], Konstantin Mikhaylov[1]; (1) University of Oulu, Oulu, Finland; and (2) VTT Technical Research Centre of Finland Ltd., Espoo, Finland. *Closing Remarks*
Work-12	*"1st Workshop on Artificial Intelligence of Things (AIoT)"*		
	Organizers		• **Wei Xiang,** La Trobe University, Melbourne, Victoria, Australia
	Work-12 - Session 1 **Friday October 20th 08:30-10:30 WEDST**		*Session 1: "Artificial Intelligence of Things"* *Keynote 1: "Title"*, Speaker, location, Affiliation

	Hybrid (In Person in Aveiro and Virtual Live Online) **Room 3**	*1377*	**Talk 1: "SAFE-HEALTH: A Secure Framework for Advancing Edge-Based Health 5.0."**, Nastaran Farhadighalat[1], Nahid Farhadi Ghalati[2], Sanaz Nikghadam-Hojjati[1], Eda Marchetti[3], and Jose Barata[1]; (1) Universidade NOVA de Lisboa (UNINOVA), Lisbon, Portugal; (2) University of California at Berkeley, Berkeley, California, USA; and (3) Institute of Information Science and Technologies (ISTI-CNR), Pisa, Italy.
Work-14	*"2nd Workshop on Digital Twins and the Internet of Things"*		
	Organizers		• **Roberto Minerva**, Telecom Sud Paris, Institut Polytechnique de Paris, Evry, France • Noel Crespi,Telecom Sud Paris, Institut Polytechnique de Paris, Evry, France • Adam Drobot, OpenTechWorks Inc., Wayne, Pennsylvania, USA
	Work-14 - Session 1 **Wednesday October 18th 08:30-10:30 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 3**	 *1292*	**Session 1: "Digital Twins and IoT"** **Opening Remarks** **Talk 1: "The Race for Digital Operations",** Max Blanchet, Senior Managing Director, Global Supply Chain & Operations Strategy, Lead of Accenture Strategy, Paris, France. **Talk 2: "Digital Twin Architectures",** Ernoe Kovacs, Senior Manager at NEC Laboratories Europe GmbH, Heidelberg, Baden-Württemberg, Germany. **Talk 3: "Aggregation and Composition of Digital Twins",** Gyu Myoung Lee, Professor Faculty of Engineering and Technology, School of Computer Science and Mathematics, Liverpool John Moores University, Liverpool, England, UK. **Talk 4: "Multifaceted Autonomy as a Negotiable Asset of Digital Process Twins.",** Richard Heininger, Thomas Ernst Jost, and Christian Stary; Institute of Business Informatics: Communications Engineering, Business School, Johannes Kepler University Linz, Linz, Austria.
	Work-14 - Session 2 **Wednesday October 18th 11:00-13:00 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online)		**Session 2: "Digital Twins and IoT"** **Talk 5: "Enhancing OneM2M IoT standards to enable Digital Twins.",** JaeSeung Song, Professor of Department of Computer and Information Security, Sejong University, Seoul, South Korea.

	Room 3		*Talk 6: (Keynote) "Secure Architectures and Standards for Digital Twins.",* Vartan Piroumian, Technology Consultant and Enterprise Architect, Newport Beach, California, USA. *Talk 7: "Digital Twins and IoT",* Claudio Savaglio, Laboratory of Smart Pervasive and Mobile Systems Engineering (SPEME), Department of Computer Science, Modeling, Electronics and Systems Engineering (DIMES), University of Calabria, Calabria, Italy.
	Work-14 - Session 3 **Wednesday October 18th 16:30-18:30 WEDST Hybrid** (In Person in Aveiro and Virtual Live Online) **Room 3**		*Session 3: "Digital Twins and IoT"* *Talk 8: "Artificial Intelligence and Digital Twins",* Praboda Rajapaksha, Department of Computer Science, Aberystwyth University, Aberystwyth, Wales, UK *Talk 9: "Digital Twins for Smart Cities.",* Joel Myers, CEO Domila Ltd., Dublin Ireland, and Chair of the IEEE Smart Cities Future Summit, and Victor Larios, Director of the Smart Cities Innovation Center (CUCEA), Guadalajara University, Guadalajara, Mexico. *Talk 10: "Edge and Cloud Infrastructure for Digital Twins",* Flavio Bonomi, Digital Transformation Executive, Solutions Architect, Platform Engineering and Intelligent Edge, Accenture, Palo Alto, California *Panel Discussion and Conclusion*
Work-16	*"1st Workshop on Digital Solutions for Natural Event Management: Leveraging IoT and Drones for Biodiversity Conservation and Disease Control"*		
	Organizers		• **YunJia Wang**, China University of Mining and Technology (CUMT), Xuzhou, China • **Chee Kiat Seow**, University of Glasgow, Glasgow, Scotland, UK • **Henrik Hesse**, University of Glasgow, Glasgow, Scotland, UK • **Victor Wang**, Singapore Institute of Technology (SIT), Singapore
	Work-16 - Session 1 **Thursday October 19th 08:30-10:30 WEDST**		*Session 1: "Digital Solutions for Natural Event management"* *Keynote 1: "Guardians of the Wild: UAV-Based IoT Solutions for Wildlife Protection and Fire Prevention",* Dinesh Bhatia, University of Glasgow, Glasgow, Scotland, UK

Hybrid (In Person in Aveiro and Virtual Live Online) **Room 6**	1412	**Talk 1: "AI-Assisted Manual Segmentation Web Application for Geospatial Satellite and Imagery Data.,** Xun Thong Cham, Ming Le Soh, Chen Fung, Xavern Cheh, Yi Jie Nicholas Poh, Henrik Hesse, Kimberly Fornace, Fedra Trujillano, Chun Yu Peter Yau, Qi Cao, and Chee Kiat Seow; University of Glasgow, Glasgow, Scotland, UK.
	1413	**Talk 2: "Drone Navigation System for Autonomous Mosquito Sampling in Tree Canopies.",** Kai En Yong, Daniel Kim Hui Kieu, Yee Kit Goh, XiangHui Zhang, Xian Hui Loo, Huiqing Glennice Tong, Peter ChunYu Yau, Chee Kiat Seow, Kimberly Fornace, and Henrik Hesse; University of Glasgow, Glasgow, Scotland, UK.

****