



[Conference](#) »Program

- 1- The registration system (<https://edas.info/r32393>) is now open. Each paper should be registered with Early Full Registration Rate (non Student Rate) before April 21, 2025. Any paper without registration will be withdrawn automatically.

2- PDF Express is Open! Create your final paper using pdf express: <https://ieee-pdf-express.org/account/clientlogin> (code: 63283x)

3-Conference program: https://attend.ieee.org/icct-europe/wp-content/uploads/sites/646/2025-IEEE-International-Conference-on-Consumer-Technology-Europe-ICCT-Europe-Program_v6.pdf

4-Zoom-Colibri link in room Afonso III – <https://videoconf-colibri.zoom.us/j/97523947350>

5-Zoom-Colibri link in room Afonso I – <https://videoconf-colibri.zoom.us/j/96294102619>



2025 IEEE International Conference on Consumer Technology-Europe (ICCT-Europe) Program

Time (Lisbon)	Afonso I	Afonso II	Afonso III	Restaurant	Sol & Jardim Restaurant
Monday, April 28					
09:00-09:15			<u>Welcome Session</u>		
09:20-10:20			<u>Wider range of consumer devices across mobile ecosystem are set to adopt wireless power, including wearables</u>		
10:20-10:40		<u>Coffee Break</u>			
10:40-12:20			<u>Machine Learning</u>		
12:20-12:40	<u>Healthcare and Wellbeing</u>				

Time (Lisbon)	Afonso I	Afonso II	Afonso III	Restaurant	Sol & Jardim Restaurant
12:40- 14:00				<u>Lunch</u>	
14:00- 15:00			<u>mm-Wave System and Circuit Design for Highly-Integrated Radar Transceivers</u>		
15:00- 15:20		<u>Coffee</u> <u>Break</u>			
15:20- 16:40	<u>Human-Machine and Entertainment</u>		<u>Radio Frequency</u>		

Time (Lisbon)	Afonso I	Afonso II	Afonso III	Restaurant	Sol & Jardim Restaurant
Tuesday, April 29					
09:00- 09:15			<u>Welcome Session</u>		
09:20- 10:20			<u>New Fronteirs in Non-Hermitian Photonics</u>		
10:20- 10:40		<u>Coffee</u> <u>Break</u>			
10:40- 12:40	<u>Wireless</u> <u>Communications and</u> <u>Mobile Devices</u>		<u>Internet of Things</u>		
12:40- 14:00				<u>Lunch</u>	
14:00- 15:00			<u>Integrated Sensing and Communications:</u> <u>Could ISAC Become the 6G "killer</u> <u>Application" ?</u>		
15:00- 15:20		<u>Coffee</u> <u>Break</u>			
15:20- 16:20			<u>AV/Signal Processing</u>		
16:20- 16:40	<u>Network Security and</u> <u>Virtual Reality</u>				
20:00- 22:00					<u>Conference Dinner</u>

Time (Lisbon)	Afonso I	Afonso II	Afonso III	Restaurant	Sol & Jardim Restaurant
Wednesday, April 30					
09:00-09:15			Welcome Session		
09:20-10:20			Microelectronic Circuits and Technologies for 6G Cell-Free Massive MIMO Systems		
10:20-10:40		Coffee Break			
10:40-12:40	Sensors				
12:40-13:00			Communications Networks		
13:00-14:00				Lunch	
14:00-15:00			SWIPT - Simultaneous Wireless Information and Power Transmission - The Future of IOT		
15:00-15:20		Coffee Break			
15:20-16:00	Low Power and Sensors				
16:00-16:40			Sensors		

Monday, April 28

Monday, April 28 9:00 - 9:15 (Europe/Lisbon)

Welcome Session  

Prof Dr José Carlos Pedro, President of Telecommunications Institute

Room: Afonso III

Monday, April 28 9:20 - 10:20 (Europe/Lisbon)

Wider range of consumer devices across mobile ecosystem are set to adopt wireless power, including wearables  

Dr. Dinesh Kithany, Wired & Wireless Technologies (WAWT)

Room: Afonso III

Chair: Nuno Borges Carvalho (Universidade de Aveiro, Portugal & Instituto de Telecomunicações, Portugal)

Monday, April 28 10:20 - 10:40 (Europe/Lisbon)

Coffee Break 

Room: Afonso II

Monday, April 28 10:40 - 12:20 (Europe/Lisbon)

Machine Learning  

Room: Afonso III

Chair: Atílio Gameiro (Instituto de Telecomunicações / Universidade de Aveiro, Portugal)

10:40 [Unlocking the Potential of Deep Learning-Based Approaches in Delta Sigma Modulators](#)

Fábio D. L. Coutinho (Universidade de Aveiro, Portugal); Samuel Pereira (Instituto de Telecomunicações, IT, Portugal); Luís Almeida (Instituto de Telecomunicações, Portugal); Hugerles Silva (Instituto de Telecomunicações, IT, Brazil); Petia Georgieva (University of Aveiro, DETI/IEETA & Institute of Electronics Engineering and Telematics of Aveiro (IEETA), Portugal); Arnaldo Oliveira (Universidade de Aveiro - DETI / Instituto de Telecomunicações - Aveiro, Portugal)

11:00 *Structured and Semantic Anomaly Synthesis with ControlNet for Realistic Data*

HaeJeong Yu (Electronics and Telecommunications Research Institute, Korea (South)); Hayoung Lee, Wonjong Kim and Seong-hee Lee (ETRI, Korea (South))

11:20 [Resilient Federated Learning Framework for 6G](#)

Leonardo Almeida and Pedro Rodrigues (Instituto de Telecomunicações, Portugal); Mário Antunes (University of Aveiro, Portugal); Rui L Aguiar (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal)

11:40 Optimised Task Placement for MLOps

Pedro Rodrigues and Leonardo Almeida (Instituto de Telecomunicações, Portugal); Julio Corona (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal); Mário Antunes (University of Aveiro, Portugal); Rui L Aguiar (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal)

12:00 *Revolutionizing Research: the Role of Large Language Models in Scientific Discovery and Knowledge Generation*

Malgi Nikitha Vivekananda (Zillow Group Inc, USA); Prashant Ashok Shidlyali (AMD, USA); Vinayaka Vivekananda Malgi (Caterpillar Inc, India)

Monday, April 28 10:40 - 12:40 (Europe/Lisbon)

Healthcare and Wellbeing

Room: Afonso I

Chair: Adão Silva (Instituto de Telecomunicações, Portugal)

10:40 *Compact Memristive Neuromorphic Braille Keyboard*

Vasudev S Mallan (Kerala University of Digital Sciences, Innovation and Technology, India); Aidana Irmanova (Nazarbayev University, Kazakhstan); Alex James (Digital University Kerala, India)

11:00 Does Spending on Urban Air Quality Improvement Lead to Cost Efficiency and Health Benefits? a Computational Meta-Analysis Approach

Mohammed Al-Rawi (Instituto de Telecomunicações, Portugal); Abdullatif Abu-Dalhoum (The University of Jordan, Jordan); Sanaa S Mahdi (Visdus, Portugal)

11:20 *Market Segments for Super Apps*

Marc Hasselwander and Daniel Weiss (German Aerospace Center (DLR), Germany)

11:40 CogNetCare: a 5G-Based Cognitive Solution for Early Risk Detection and Continuous Monitoring



Fatma Marzouk (Universidade de Aveiro & Instituto de Telecomunicacoes, Portugal); David Santos (Universidade de Aveiro, Portugal & Instituto de Telecomunicações, Portugal); Bruno Viera (Neuroinova, Portugal); Ana Isabel Martins (University of Aveiro, Portugal & Institute of Electronics and Informatics Engineering of Aveiro (IEETA), Portugal); Joana Pais (Neuroinova, Portugal); Nelson Rocha (University of Aveiro & Instituto de Engenharia Electrónica e Telemática de Aveiro, Portugal); Rui L Aguiar (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal)



12:00 Drone Care Angel: AI-Driven Health Monitoring in Beyond 5G Networks



David Santos (Universidade de Aveiro, Portugal & Instituto de Telecomunicações, Portugal); David Perez Abreu (University of Coimbra, Portugal & Instituto Pedro Nunes, Portugal); Sérgio Figueiredo (Instituto Pedro Nunes, Portugal); Pedro Colarejo (Load Digital, Portugal); Rui Silva (Instituto de

Telecomunicações & Universidade de Aveiro, Portugal); Fatma Marzouk (Universidade de Aveiro & Instituto de Telecomunicacoes, Portugal); André Perdigão (Universidade de Aveiro, Portugal & Instituto de Telecomunicações, Portugal); Daniel Corujo (University of Aveiro & Instituto de Telecomunicações, Portugal); Rui L Aguiar (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal)



12:20 Predicting Potential Indicators of Early Stages of Prostate Disease in Elderly Using Magnet Sensors

João Filipe Papel and Tatsuji Munaka (Tokai University, Japan)

Monday, April 28 12:40 - 14:00 (Europe/Lisbon)

Lunch ↗

Room: Restaurant

Monday, April 28 14:00 - 15:00 (Europe/Lisbon)

mm-Wave System and Circuit Design for Highly-Integrated Radar Transceivers ↗

Prof. Dr. Vadim Issakov, Technische Universitat Braunschweig

Room: Afonso III

Chair: Deisy Mamedes (National Research Council Canada, Canada)

Monday, April 28 15:00 - 15:20 (Europe/Lisbon)

Coffee Break ↗

Room: Afonso II

Monday, April 28 15:20 - 16:40 (Europe/Lisbon)

Radio Frequency ↗

Room: Afonso III

Chair: Deisy Mamedes (National Research Council Canada, Canada)

15:20 Multi-Finger InP HEMT Source-Grounding Techniques for Hybrid and MMIC LNAs

Deisy Mamedes (National Research Council Canada, Canada); Nianhua Jiang (National Research Council of Canada (NRC) & Department of Electrical and Computer Engineering at University of Victoria, Canada); Rubin Ma (National Research Council (NRC-CNRC), Canada); Adam Densmore (National Research Council (NRC-CNRC), Canada & National Research Council, Canada)

15:40 Efficiency Improvement in a Class F Power Amplifier Using a Square Wave Signal at 1 GHz

Samuel A Santos (University of Aveiro, Portugal); Antonio Navarro (University of Aveiro & Telecommunications Institute, Portugal); Ricardo Figueiredo and Manuel Violas (Instituto de Telecomunicações, Portugal); Nuno Borges Carvalho (Universidade de Aveiro, Portugal & InstitutodeTelecomunicacoes, Portugal)

16:00 *Novel 1x2 Triangular MIMO Antenna with DGS for the Radar Application and Comparing Its Gain and Return Loss with 1x2 Circular MIMO Antenna with DGS*

B Pruthvinath Reddy (Saveetha University, India)

16:20 *A Comparative Study Between Direct Coupled Waveguide and Compline Cavity Filters at 30 GHz*

Antonio Navarro (University of Aveiro & Telecommunications Institute, Portugal); Emanuel Pereira (Aveiro University, Portugal); Ricardo Figueiredo (Instituto de Telecomunicações, Portugal); Arnaldo Oliveira (Universidade de Aveiro - DETI / Instituto de Telecomunicações - Aveiro, Portugal); Nuno Borges Carvalho (Universidade de Aveiro, Portugal & InstitutodeTelecomunicacoes, Portugal)

Human-Machine and Entertainment

Room: Afonso I

Chair: Manuel Violas (Instituto de Telecomunicações, Portugal)

15:20 *The Impact of Gamification on Learning Outcomes in Sign Language Educational Games*

Crescentia Karen Prasetya (Bina Nusantara University, Indonesia); Adelya Salsabilah Sjafrin (Universitas Bina Nusantara, Indonesia); Muhamad Fajar and Galih Dea Pratama (Bina Nusantara University, Indonesia)

15:40 *Consumer Technologies for Repair Services: the Role of Technology Openness and Repair Control*

Debora Bettiga (Politecnico di Milano, Italy)

16:00 *Electric Guitar Player Classification Using Motion Sensor Data and Information Quantity*

Ayaka Takamoto and Soichiro Matsushita (Tokyo University of Technology, Japan)



16:20 *Interactive Electric Guitar Lesson System Based on Real Time Wrist Motion Analysis*

Soichiro Matsushita and Ayaka Takamoto (Tokyo University of Technology, Japan)



Tuesday, April 29

Tuesday, April 29 9:00 - 9:15 (Europe/Lisbon)

Welcome Session  

CTSoc President - Dr. Fabrice Labeau.

Room: Afonso III

Tuesday, April 29 9:20 - 10:20 (Europe/Lisbon)

New Frontiers in Non-Hermitian Photonics  

Prof. Dr. Mário Silveirinha

Room: Afonso III

Chair: Antonio Navarro (University of Aveiro & Telecommunications Institute, Portugal)

Tuesday, April 29 10:20 - 10:40 (Europe/Lisbon)

Coffee Break 

Room: Afonso II

Tuesday, April 29 10:40 - 12:40 (Europe/Lisbon)

Internet of Things  

Room: Afonso III

Chair: Dinesh Kithany (WAWT-Wired & Wireless Technologies, United Kingdom (Great Britain))

10:40 *IoT-Integrated Multimodal Large Language Model for Real-Time Fire Detection and Risk Mitigation* 

Swarnamouli Majumdar (Zenext AI, Canada); Sonny Kirkley (Indiana University, USA)



11:00 *Pet/Animal Tracking Application Using Digibelt*

Harsha A and Suvarna Reddy (Alliance College of Engineering and Design, India)

11:20 *Accelerating Authentication Using Locality-Sensitive Hashing in a Homomorphic Encryption-Based Face Recognition System* 

Nakanishi Sei (The University of Tokyo & DXYZ Co Ltd., Japan); Yoshiaki Narusue and Hiroyuki Morikawa (The University of Tokyo, Japan)



11:40 *PLC-Based Load Control and IoT-Energy Monitoring for Grid-Connected Hybrid Systems*

Amin Al Ka'bi (Australian University - Kuwait, Kuwait)

12:00 *Machine Learning Performance on IoT Device*

Julio Corona (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal); Mário Antunes (University of Aveiro, Portugal); Rui L Aguiar (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal)

12:20 *IoT-Driven Posture Correction Using Machine Learning*

Rui Pedro Amaral (Instituto Politécnico de Setúbal & Escola Superior de Tecnologia de Setúbal, Portugal); Francisco Gervásio (Escola Superior de Tecnologia do Instituto Politécnico de Setúbal, Portugal)

Wireless Communications and Mobile Devices

Room: Afonso I

Chair: Leonardo Leyva (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal)

10:40 [Assessing the Greenhouse Gas Emissions of a Base Station](#)

Samira Jaber (Orange Innovation, France)

11:00 [AI-Based Carbon Footprint Assessment of 6G Networks: a Digital Twin Use Case](#)

Mohammed Al-Rawi and Jonathan Rodriguez (Instituto de Telecomunicações, Portugal)

11:20 [MMSE Detector for 128×32 Massive MIMO Systems Based on CG-WNSA](#)

Chih-Feng Wu and Hung-Hsiang Huang (Chang Gung University, Taiwan)

11:40 [Network Slicing and AI for Enhanced Public Safety Communications](#)

Arshad Syed (Department of Commerce, USA); Wahab Mirza (DOC & FirstNet, USA)

12:00 [SBEIN: Toward Sustainable Battery-Efficient IoT-Enabled Federated Learning Networks](#)

Alaa AlZailaa (Universidade de Aveiro, Portugal); Hao Ran Chi (Instituto de Telecomunicações and Universidade de Aveiro, Portugal); Ayman Radwan (Instituto de Telecomunicações, Portugal); Rui L Aguiar (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal)

12:20 [LiteMirroring: BT Based Screen Mirroring Solution](#)

Sanghun Lee (Samsung Electronics Company, Korea (South))

Tuesday, April 29 12:40 - 14:00 (Europe/Lisbon)

Lunch 

Room: Restaurant

Tuesday, April 29 14:00 - 15:00 (Europe/Lisbon)

Integrated Sensing and Communications: Could ISAC Become the 6G "killer Application" ?  

Prof. Dr. Lajos Hanzo, Univ. of Southampton, UK

Room: Afonso III

Chair: Atílio Gameiro (Instituto de Telecomunicações / Universidade de Aveiro, Portugal)

Tuesday, April 29 15:00 - 15:20 (Europe/Lisbon)

Coffee Break 

Room: Afonso II

Tuesday, April 29 15:20 - 16:20 (Europe/Lisbon)

AV/Signal Processing

Room: Afonso III

Chair: Antonio Navarro (University of Aveiro & Telecommunications Institute, Portugal)

15:20 [An Efficient Projection for Fast Low Bitrate Omnidirectional Video Compression](#)

Jose N. Filipe (Instituto de Telecomunicações, Portugal & University of Aveiro, Portugal); Luis Tavora (Polytechnic Institute of Leiria, Portugal); Sérgio M. M. Faria (Instituto de Telecomunicações & Instituto Politécnico de Leiria, Portugal); Antonio Navarro (University of Aveiro & Telecommunications Institute, Portugal); Pedro A. Amado Assuncao (Politécnico de Leiria - Instituto de Telecomunicações, Portugal)

15:40 [Aperture Control for Video Recording of Digital Cameras](#)

Wei-Te Chang and Wen-Chung Kao (National Taiwan Normal University, Taiwan)

16:00 [Heliumspeech Recognition Algorithm Based on Spectrogram](#)

Shibing Zhang (Nantong University, China); Tao Zhang (Shanghai Sipo Polytechnic, China)

Tuesday, April 29 15:20 - 16:40 (Europe/Lisbon)

Network Security and Virtual Reality

Room: Afonso I

Chair: Julián Cabrera (Universidad Politécnica de Madrid, Spain)

15:20 [Authentication Scheme for Blockchain-Assisted Smart Home Networks](#)

Hanni Ding (Hefei University of Technology, China)

15:40 [Evaluating the Effectiveness of Differential Privacy Against Profiling](#)

Catarina Silva (Universidade de Aveiro, Portugal); João Paulo Barraca (University of Aveiro & Instituto de Telecomunicações, Portugal); Paulo Salvador (DETI, IEETA, University of Aveiro, Portugal)

16:00 [Full Body Tracking System Based on Valve Lighthouse for Dance and Fitness Training with Real-Time Scoring Feedback](#)

Shuping Wang and Igor Goncharenko (Ritsumeikan University, Japan)

16:20 [Is Real-Time Deep Learning-Based Monocular Depth Estimation Accurate for Multi-Camera Setups?](#)

Javier Uson and Julián Cabrera (Universidad Politécnica de Madrid, Spain)

Tuesday, April 29 20:00 - 22:00 (Europe/Lisbon)

Conference Dinner

Room: Sol & Jardim Restaurant

Wednesday, April 30

Wednesday, April 30 9:00 - 9:15 (Europe/Lisbon)

Welcome Session  

Prof. Dr. Antonio Navarro, Conference Chair

Room: Afonso III

Wednesday, April 30 9:20 - 10:20 (Europe/Lisbon)

**Microelectronic Circuits and Technologies for 6G Cell-Free
Massive MIMO Systems**  

Dr. Paulo Oliveira, Infineon Technologies

Room: Afonso III

Chair: Antonio Navarro (University of Aveiro & Telecommunications Institute, Portugal)

Wednesday, April 30 10:20 - 10:40 (Europe/Lisbon)

Coffee Break 

Room: Afonso II

Wednesday, April 30 10:40 - 13:00 (Europe/Lisbon)

Communications Networks  

Room: Afonso III

Chair: Atílio Gameiro (Instituto de Telecomunicações / Universidade de Aveiro, Portugal)

10:40 [Visible Light Communication for Autonomous Mobile Platform: Evaluation of 16-QAM Transmission System](#)

Amanda Rühlemann Barreira and Hypolito J. Kalinowski (Universidade Federal Fluminense, Brazil);
Gonçalo Figueiredo (Instituto Superior Técnico, Portugal); [Paulo S André](#) (Instituto de
Telecomunicações, Portugal)

11:00 [Latency and Energy Modeling of Blockchain-Digital Twin-Relied Edge Computing Task Scheduling](#)

[Ayesha Jadoon](#) (University of Aveiro, Portugal); Haoran Chi (IT- Aveiro, Portugal); Daniel Corujo
(University of Aveiro & Instituto de Telecomunicações, Portugal); Rui L Aguiar (University of Aveiro,
Portugal & Instituto de Telecomunicações, Portugal); Francisco J. Ferrão (Data Machine Elite, Alenquer,
Portugal)

11:20 [A Flexible Smart-Packaging Architecture Based on BLE-PAwR for Logistics Package Traceability](#)

[Ruben RP Susano](#) (Polytechnic of Leiria, Portugal); Telmo R. Fernandes (IPLeiria / Institute of
Telecommunications & ESTG/IT-DL, Portugal); Paulo J. C. Ventura (IPLeria, Portugal); Nuno Rodrigues
(Instituto de Telecomunicações - ESTG IPLeiria, Portugal); Filipe Perdigoto (Digiwest - Embedded and

Wireless Solutions Lda, Portugal); Nelson Figueiredo (Prozis, Portugal); Sérgio M. M. Faria (Instituto de Telecomunicações & Instituto Politécnico de Leiria, Portugal)

11:40 [A Server to Support a Fire Warning System for Car Drivers](#)

Rodolfo Oliveira, Miguel Coelho and Luís Santiago (Universidade de Aveiro, Portugal); Antonio Navarro (University of Aveiro & Telecommunications Institute, Portugal); Nuno Borges Carvalho (Universidade de Aveiro, Portugal & Instituto de Telecomunicações, Portugal); Joana Vieira and Ana Maria Rocha (Universidade de Aveiro, Portugal); Rogério N Nogueira (Instituto de Telecomunicações, Portugal)

12:00 [Modified Block Equalization for Gigabit Automotive Ethernet System](#)

Chih-Feng Wu and Min-Yuan Tsai (Chang Gung University, Taiwan)

**12:20 [Implementation of 50G/100G IM-PON](#) **

Mario Lima (DETI, University of Aveiro, Instituto de Telecomunicações, Portugal); Filipe Lima Da Rocha Miranda (University of Aveiro, Portugal); Francisco Manuel Rodrigues (Universidade de Aveiro & PICadvanced S.A., Portugal)



12:40 *Sustainable Consumer Electronics: Driving the Green Economy Through Innovation*

Mohammed Al-Rawi (Instituto de Telecomunicações, Portugal)

Wednesday, April 30 10:40 - 12:40 (Europe/Lisbon)

Sensors

Room: Afonso I

Chair: Jose N. Filipe (Instituto de Telecomunicações, Portugal & University of Aveiro, Portugal)

10:40 [Extraction of the Respiratory Volume Signal with an Intel RealSense D455 Depth Camera: A Qualitative Study](#)

Antonio Nocera (Università Politecnica Delle Marche, Italy); Anass Chebbaki (Università Politecnica delle Marche, Italy); Linda Senigaglia (ETIS UMR 8051, CYU, ENSEA, CNRS, France); Gianluca Ciattaglia (Università Politecnica delle Marche, Italy); Ennio Gambi (Università Politecnica Delle Marche, Italy)

11:00 *Advanced Data Mining Techniques for Optimizing Wireless Sensor Networks: Predictive Analytics and Network Efficiency*

Mupenzi Nkunduwa Julien (Nusa Putra University, Indonesia)

11:20 *Mitigating Device Heterogeneity for Enhanced Indoor Positioning System Performance Using CNN-LSTM Model*

Mohamedalfateh Tagalsir Maroof Saeed (Ondokuz Mayıs University, Turkey); Mosab Aboidrees Altraifi Yousif (University of Gezira, Sudan); İbrahim Öztürk (Osmaniye Korkut Ata University, Turkey)

11:40 [Target Localization in Distributed MIMO OFDM Radar](#)

Leonardo Leyva (University of Aveiro, Portugal & Instituto de Telecomunicações, Portugal); Joumana Kassam (University of Aveiro & Instituto de Telecomunicações, Portugal); Daniel Castanheira (Instituto de Telecomunicações (IT)/University of Aveiro, Portugal); Adão Silva (Instituto de Telecomunicações, Portugal); Atílio Gameiro (Instituto de Telecomunicações / Universidade de Aveiro, Portugal)

12:00 *Fog4Health: Real-Time Healthcare Data Processing with Raspberry Pi Fog Nodes*

Caren Fernandes, Najam Ul Hasan, James Baldwin, Kavya Adhikari, Laurence Hirsch and Jonathan B Zasada-James (Sheffield Hallam University, United Kingdom (Great Britain))

12:20 *Wireless Sensor Box for Data Collection in Connected Vehicles Environment*

Rafael Almeida (Instituto de Telecomunicações, Portugal & Departamento de Eletrónica, Telecomunicações e Informática, Universidade de Aveiro, Portugal); Miguel Carvalhosa (Instituto de Telecomunicações, University of Aveiro, Portugal); João Almeida (Instituto de Telecomunicações, Portugal & Universidade de Aveiro, Portugal); Joaquim Ferreira (University of Aveiro, Portugal)

Wednesday, April 30 12:40 - 14:00 (Europe/Lisbon)**Lunch ↗**

Room: Restaurant

Wednesday, April 30 14:00 - 15:00 (Europe/Lisbon)**SWIPT - Simultaneous Wireless Information and Power Transmission - The Future of IOT 🗨️ ↗**

Prof. Nuno Borges de Carvalho, Universidade de Aveiro e Instituto de Telecomunicações

Room: Afonso III

Chair: Manuel Violas (Instituto de Telecomunicações, Portugal)

Wednesday, April 30 15:00 - 15:20 (Europe/Lisbon)**Coffee Break ↗**

Room: Afonso II

Wednesday, April 30 15:20 - 16:40 (Europe/Lisbon)**Sensors 🗨️ ↗**

Room: Afonso III

Chair: Adão Silva (Instituto de Telecomunicações, Portugal)

15:20 *Neural Network Evaluation for Magnetic Fingerprinting Positioning*

Felipe Parralejo (University of Extremadura & Sensory Systems Research Group, Spain); Fernando J. Aranda (Universidad de Extremadura & Sensory Systems Research Group, Spain); Paula Rangel (University of Extremadura, Spain); África Vicario Millán (Universidad de Extremadura, Spain); Andrea Quirós and Fernando J. Álvarez (University of Extremadura, Spain)

15:40 *Evaluating Preprocessing Techniques for Target Labels in Non-Intrusive Load Monitoring*

Muhammad Muaz (German Research Centre for Artificial Intelligence, Germany)

16:00 *Harnessing AI for Agriculture Utilizing Color-Condition Camera Sensors and Thermal Imaging Drones for Crop Color-Condition Detection and Predictive Yield Analysis with Inventory Management System*

Cris Paul V. Guatno (Pamantasan ng Lungsod ng Maynila, Philippines)

16:20 *Combining Fingerprinting and Proximity Positioning for Wi-Fi and BLE RSS Measurements*

Fernando J. Aranda (Universidad de Extremadura & Sensory Systems Research Group, Spain); Felipe Parralejo (University of Extremadura & Sensory Systems Research Group, Spain); Andrea Quirós (University of Extremadura, Spain); África Vicario Millán (Universidad de Extremadura, Spain); Jorge Morera and Fernando J. Álvarez (University of Extremadura, Spain)

Wednesday, April 30 15:20 - 16:00 (Europe/Lisbon)

Low Power and Sensors ↗

Room: Afonso I

15:20 *Bi-Directional Dynamic RAM Power Management (BDRPM) Heap for Ultra-Low-Power IoT Devices*

Sung Ho Park and Soon Ju Kang (Kyungpook National University, Korea (South))

15:40 *Eco-Location: AI-Powered Community Reporting for Environmental Protection*

Clark Christian Orzame (National University Philippines, Philippines); Lester Miguel L Talento and Lord Edgardian J. Tavu (National University - Philippines, Philippines)

EDAS at golf for 194.65.157.170 ([Wed, 30 Apr 2025 01:36:33 +0100 WEST](#)) [User 163193 using Win10:Chrome 109.0 0.376/1.857 s] [Request help](#)