



Session 1 [CSRF] Monday, Nov 18, 10:15am

Session Chair: Sho Nobumoto

10091 Securing Digital Identities with Blockchain and Smart Contracts

Lucia Muñoz Solanas, Fundación Vicomtech, Spain

10095 The Contribution of Benchmarking Tools to Increase Transparency in Agricultural Data Sharing in Value Chains and Farmer's Trust

Antonella Di Fonzo, CREA-Council for Agricultural Research and Agricultural Economy Analysis, Italia

10165 Species-independent Analytical Tools for Non-destructive and Real-time Detection of Shade Avoidance Syndrome in Plants

In-Cheol Jang, Temasek Life Sciences Laboratory, Singapore

10228 Use of MQx-based System for Characterization and Optimization of Plant-Derived Volatile Organic Compounds (VOCs)

Jaime Lloret, Polytechnic University of Valencia, Spain



Session 2 [CADAT] Monday, Nov 18, 12:00pm

Session Chair: In-Cheol Jang

20003 Crop yield estimation using satellite images and municipal yield statistical data
Chisa Iwasaki, National Agriculture and Food Research Organization, Japan

20007 Variety Classification by Image Recognition of Grape Leaf and Berry
Ryo Sugiura, National Agriculture and Food Research Organization, Japan

20022 Shore Identification and Navigation Route Modification Function for Autonomous Boats Used to Measure the Depth of Irrigation Ponds
Sho Nobumoto, Shibaura Institute of Technology, Japan



Session 3 [EXPLAINABILITY, VEHICULAR ANALYTICS] Monday, Nov 18, 3:00pm
Session Chair: Alberto Mino Calero

10009 3D-Dynamic Representation of DNA/RNA Sequences: A Review
Piotr Waz, Medical University of Gdansk, Poland

10018 Explainable Facial Emotion Recognition with the use of Vision Transformers
Isidoros Perikos, University of Patras, Greece

30007 Unmasking Threats in UAV Networks: A Semi-Supervised Approach to Cyphal Security
Kabid Hassan Shibly, National Institute of Information and Communications Technology (NICT), Japan



Session 4 [CSRF, CADAT] Tuesday, Nov. 19, 10:15am

Session Chair: Laura Garcia

10029 Smart Collars for Sheep: Leveraging Machine Learning for Improved Pasture Management

Pedro Goncalves, Instituto de Telecomunicacoes, Portugal

10145 Identity Provider based on Self-Sovereign Identities and Blockchain Technology

Daniel Paredes Garcia, Fundación Vicomtech, Spain

20032 Beehive Monitoring Based IoT Technologies and AI

Lorena Parra, Universidad Politécnica de Madrid, Spain



Session 5 [CADAT] Tuesday, Nov. 19, 12:00pm

Session Chair: Izar Azpiroz

20027 Real-Time Egg Detection Using Edge Computer Vision

Nicholas Hadjisavvas, ALGOLYSIS LTD, Cyprus

20037 System for monitoring crop and meteorology parameters using physical sensors and computer vision cameras

Laura García, Universidad Politécnica de Cartagena, Spain

20046 Chatbot Integrated Holographic System for Digital Agriculture and Education

Jaime Lloret, Polytechnic University of Valencia, Spain



Session 6 [COCE, CADAT] Tuesday, Nov. 19, 3:00pm

Session Chair: Nicholas Hadjisavvas

30010 A Multiple-Location Modeling Scheme for Physics-Regularized Networks: Recurrent Forecasting of Fixed-Location Buoy Observations

Mahdi Abdelguerfi, University of New Orleans, USA

30016 Development of an Acoustic Antenna for Event Triggering in KM3NeT

Miguel Ardid Ramirez, Polytechnic University of Valencia, Spain

30014 Physics-Regularized Buoy Forecasts: A Multi-Hyperparameter Approach Using Bounded Random Search

Austin Schmidt, University of New Orleans, USA

20015 A Feature-Based Correlation Approach for Analyzing Price Trends of Citrus in Valencia province (Spain)

Nuria Ortigosa, Universitat Politècnica de València, Spain



Session 7 [EXPLAINABILIT] Wednesday, Nov 20, 10:15am

Session Chair: Isidoros Perikos

10005 A Two-Dimensional Computational Model for DNA/RNA Classification

Dorota Bielinska-Waz, Medical University of Gdansk, Poland

10013 Explain Yourself

Valentin Goettisheim, Hochschule Furtwangen University, Germany

10025 An XAI Approach on the Capacity of Transformers to Learn Time Dependencies in Time Series Forecasting'

Alberto Mino Calero, NTNU, Norway



Session 8 [CSRF] Wednesday, Nov 20, 12:00pm

Session Chair: Daniel Baumann

10220 Testing the Variation in Performance of a Coil-Based Soil Moisture Sensor with Soil-Core and Air-Core Deployments

Lorena Parra, Universidad Politécnica de Madrid, Spain

10056 Point Cloud Fusion Algorithm for High-Quality Digital Surface Model Generation from Multi-Date Stereo Images

Izar Azpiroz, Fundación Vicomtech, Spain

10207 Efficient Water Use in Citrus Orchards in the Context of Water Scarcity: AquaCitrus Model Applications

Najib Boubakri, Universitat Politecnica de Valencia, Spain

10175 Regenerative Agriculture – Where is the World Going?

Mahmood Ahmad, RIZQ/YUNUS WEFnex Hub AIT, Thailand



Session 9 [SCALABILITY] Wednesday, Nov 20, 3:00pm

Session Chair: Petre Dini

20010 A Quantitative and Qualitative Comparison of Machine Learning Inference Frameworks

Egi Brako, Georg-August-Universität Göttingen, Germany

20005 Total Cost of Ownership: Cloud-based vs. Onboard Vehicle Software Components

Daniel Baumann, Karlsruhe Institute of Technology (KIT), Germany

20014 Scalable Software Distribution for HPC-Systems Using MPI-Based File Systems in User Space

Jakob Dieterle, Gesellschaft für wissenschaftliche Datenverarbeitung Göttingen (GWDG), Germany