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**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*

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**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* 

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**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*

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**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 Politècnica de Madrid, Spain*

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**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*

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**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*

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**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*

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**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*

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**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*