# CONFERENCE PROGRAM

## 23rd International Conference on Applied Computing 2026

## 1st International Conference on Data Science and Digital Innovation 2026

## 25th International Conference on WWW/Internet 2026

## Saturday 24th, October 2026

**08:30-18:45 Welcome Desk** (closes for lunch – 13:00 to 14:15)
**(Room: Eduardo Viana IV)**

**09:40-10:00 Session O – Opening Session**
**(Room: Eduardo Viana III)**

**OPENING SESSION**
*Profs. Pedro Isaias and Paula Miranda*

**10:00-11:00 Session KL 1 – Keynote Presentation**
**(Room: Eduardo Viana III)**

**"BEYOND AUTOMATION AND OFFLOADING: RETHINKING HUMAN–AI COLLABORATION FOR LEARNING"**
*Professor Michail Giannakos, Co-Director of AI LEARN, Norwegian University of Science and Technology (NTNU), Norway*

**11:00-11:30 Coffee Break**

**11:30-13:00 Session 24.1**
**Deep Learning**
**(Room: Eduardo Viana III)**
***Chair: João Paulo Papa***

**ATTENTION-BASED CHAOTIC SELF-SUPERVISION FOR MEDICAL IMAGE CLASSIFICATION (F034)**
*João Batista Florindo and Amanda Pontes de Oliveira Ornelas*
**AN EXPLAINABLE ARTIFICIAL INTELLIGENCE FORECASTING TOOL FOR ELECTRICITY DEMAND (F072)**
*Kimberly Sorrell, Amir Etemadi and Shahram Sarkani*
**ROBUST SEA STATE CLASSIFICATION ACROSS THE BEAUFORT SCALE USING SYNTHETIC DATA AUGMENTATION (F070)**
*Miran Pobar and Marina Ivasic-Kos*

**11:30-13:00 Session 24.2**
**Software Engineering // Data Engineering**
**(Room: Eduardo Viana I)**
***Chair: Asad Masood Khattak***

**AN ONTOLOGY TO DEFINE COGNITIVE PRODUCTION MODELS FOR PROGRAMMING COCKTAILS (F036)**
*Rodrigo Casal Novo, Alvaro Costa Neto, Maria João Tinoco Varanda Pereira and Pedro Rangel Henriques*
**RETHINKING THE SOFTWARE PROJECT FRAMEWORK: FOUNDATIONS FOR THE DEVELOPMENT OF SPF 2.0 (F106)**
*Marta Maria Guedes da Silva Neta and Hermano Perrelli de Moura*
**A MICROSERVICES ARCHITECTURE FOR A WEB-BASED DECISION SUPPORT SYSTEM FOR OLIVE TREE DISEASE PROTECTION (F046)**
*Maria Eduarda Pedroso, António Jorge da Silva Trindade Duarte, Fabio Irigon Pereira and Maria João Tinoco Varanda Pereira*

**13:00-14:15 Lunch Break**

**14:15-15:15 Session KL 2 – Keynote Presentation**
**(Room: Eduardo Viana III)**

**"FROM TRUST TO INSIGHT: THE ROLE OF INTELLIGENT HCI IN DECENTRALIZED HEALTHCARE"**
*Professor Cristiano André da Costa, UNISINOS, Brazil*

**15:20-16:10 Session 24.3**
**Smart Organisations, Platforms, and Digital Ecosystems**
**(Room: Eduardo Viana III)**
***Chair: Manuel Portela Charnejovsky***

**BEYOND PRIVACY CALCULUS: HOW REALIZED CUSTOMER VALUE DRIVES DATA SHARING IN AI-ENABLED RETAIL RELATIONSHIPS (F036)**
*Martha Rivera-Pesquera, José Antonio Lanzguerrero and Patricia Garza*
**BRIDGING THE GAP IN S&OP 4.0: A DECISION INTELLIGENCE ARTIFACT FOR ADVANCED FORECASTING AND SCENARIO SIMULATION (S043)**
*Luiz Reni Trento*

**15:20-16:20 Session 24.4**
**Web Data and Knowledge**
**(Room: Eduardo Viana I)**
***Chair: Shahram Sarkani***

**A REQUIREMENT-DRIVEN AGENT-BASED APPROACH FOR QUALITY ASSESSMENT OF ENTERPRISE KNOWLEDGE GRAPHS (F014)**
*Narciso Arruda, Valéria M. Pequeno, Flávio Lima, Frederico Ribeiro, Vânia M. P. Vidal and Marco A. Casanova*
**FROM EXPERT-DEFINED META-PATHS TO AUTOMATICALLY DISCOVERED SEMANTIC CRITERIA FOR EXPLAINABLE ONTOLOGY-BASED RECOMMENDATION IN THE CBRN DOMAIN (F056)**
*Manos Markoulakis, Angelos Mikelis, Stefanos Palmos, Vagelis Karakolis, Sofia Karma, Christos Ntanos, Spiros Mouzakitis and Dimitris Askounis*

**16:15-16:45 Coffee Break**

**16:45-18:45 Session 24.5**
**AI & Computational Methods**
**(Room: Eduardo Viana III)**
***Chair: Amir Etemadi***

**CTIS: CRITICAL TASK INDEX SCHEDULER FOR AI-DRIVEN 5G IOT HEALTHCARE NETWORKS (F062)**
*Ammad Ali, Asad Masood Khattak, Noman Gul, Ashraf Khalil, Imran Taj and Bashir Hayat*
**DISTURBANCE-IMPACT-DOMAIN HYPERGRAPH REINFORCEMENT LEARNING FOR SHIP-BLOCK REACTIVE SCHEDULING (F063)**
*Guobin Pei and Zuhua Jiang*
**ZERO-SHOT FORECASTING USING TIME SERIES FOUNDATION MODELS ON INDUSTRIAL DATASETS (F091)**
*Bernhard Anzengruber-Tanase and Ekaterina Sysoykova*
**SINGLE-IMAGE MULTIMODAL FACIAL ANALYSIS FOR EXPLORATORY AUTISM CLASSIFICATION: AN IDENTITY-AWARE EVALUATION (F130)**
*Mohammad Abbadi, Yassine Himeur, Shadi Atalla, Mohammad Sami Zitouni, Hussain Al-Ahmad and Mohammed A. Ala'anzy*

**16:45-18:15 Session 24.6**
**Machine Learning**
**(Room: Eduardo Viana I)**
***Chair: Jonathan Kressel***

**UNLOCKING OPTIMUM-PATH FOREST CAPABILITIES IN WEAKLY-SUPERVISED PIXEL-LEVEL SEGMENTATION FOR ISCHEMIC STROKE LESION (F045)**
*Danilo Samuel Jodas, João Paulo Papa and Fumie Costen*
**HIGH-DIMENSIONAL OUTLIER DETECTION USING DISTANCE DESCENT AND APPROXIMATE SEARCH (F080)**
*David Muhr, Michael Affenzeller and Josef Küng*
**MACHINE LEARNING APPLIED TO DETECT DEPRESSIVE SYMPTOMS: A SYSTEMATIC LITERATURE MAPPING (F100)**
*Willian Jorge Sousa Furtado, Almir Martins de Oliveira and Jose Wilker Pereira Luz*

# Sunday 25th, October 2026

**08:30-15:30 Welcome Desk** (closes for lunch – 13:00 to 14:15)
**(Room: Eduardo Viana IV)**

**08:50-11:00 Session 25.1**
**Applied Digital Systems**
**(Room: Eduardo Viana III)**
***Chair: Mohammad Sami Zitouni***

**WHAT COMES NEXT? GROUNDED INDUSTRIAL GUIDANCE GENERATED AT RUNTIME (F104)**
*Jonathan Kressel, Md Khalid Siddiqui and Gunther May*
**OVERCOMING HIGH INTRINSIC GNSS ALTITUDE SENSING ERRORS FOR ANDROID APPS ASSISTING PILOTS IN STEERING FIXED-WING AEROPLANES (F114)**
*Hans Weghorn*
**AN INTERACTIVE ENVIRONMENT FOR EXECUTABLE OPERATIONAL SEMANTICS (F074)**
*William Steingartner, Juraj Molčan, Samuel Novotný, Monika Kohútová and Davorka Radaković*
**TOWARDS A FEDERATED INDUSTRIAL METAVERSE: FROM FEDERATED EXCHANGE TO A FEDERATED PRESENCE (S094)**
*Christoph Zieringer, Jessel John, Vineet Nagrath, Gökhan Cenk and Gunther May*
**OPENDESIGN IN THE MUNICIPAL CONFERENCE OF CITIES: AN EXPERIENCE GROUNDED IN SOCIALLY AWARE DESIGN (S052)**
*Flávio Henrique Alves, Maria Cecília Calani Baranauskas and Alexandre L'Erario*

**09:30-11:00 Session 25.2**
**Intelligent Systems**
**(Room: Eduardo Viana I)**
***Chair: Andreas Schmidt***

**BENCHMARKING INFORMATION ACCESS STRATEGIES FOR SLIDE-AWARE RETRIEVAL-AUGMENTED GENERATION (F097)**
*Alexandru Florentin Florea, Iulian Popa and Alexandra Băicoianu*
**NOTHING LEAVES THE ROOM: MEASURING A FULLY ON-PREMISES SPEECH ASSISTANT AND ITS FAILURE MODES (F103)**
*Md Khalid Siddiqui, Jonathan Kressel, Gökhan Cenk and Gunther May*
**WARM-STARTED METAHEURISTICS FOR SELECTIVE PICKUP-AND-DELIVERY ROUTING FOR A SINGLE COURIER (F122)**
*Rareș-Nicolae Oneț, Adrian-Marius Deaconu and Iulian Popa*

**11:00-11:30 Coffee Break**

**11:30-13:00 Session 25.3**
**Cybersecurity**
**(Room: Eduardo Viana III)**
***Chair: William Steingartner***

**REFORGE: A METHOD FOR BENCHMARKING LLMS' REVERSE ENGINEERING CAPABILITIES IN DECOMPILED BINARY FUNCTION NAMING (F044)**
*Nicolas Koller and Andreas U. Schmidt*
**EDGE-ORIENTED INTRUSION DETECTION FOR IEC 61850 GOOSE MESSAGES: A REAL-TIME UNIDIRECTIONAL GRU APPROACH (F028)**
*Carlos Eduardo de Sousa, Francisco Jorge Alves de Oliveira, Bilmar Angelis de Almeida Ferreira, Kleber Melo e Silva, Fábio Lúcio Lopes de Mendonça and João José Costa Gondim*
**ADAPTIVE RANK-BASED NODE ANOMALY DETECTION IN DYNAMIC GRAPHS (F129)**
*Claudia Cavallaro*

**11:30-13:00 Session 25.4**
**Artificial Intelligence for the Web**
**(Room: Eduardo Viana I)**
***Chair: Emmanouil Minoas Markoulakis***

**SEMANTIC HARNESS FOR ENERGY FLEXIBILITY AGENTIC AI PLATFORM (F048)**
*Milorad Tosic, Nenad Petrovic and Olivera Tosic*
**PILOT SETUP AND EVALUATION OF AI-BASED SOLUTIONS FOR DATA DRIVEN APPLICATIONS (F049)**
*Alexandros Kostopoulos, Ioannis P. Chochliouros, George Lyberopoulos, Dimitris Salmatanis, Jason Diakoumakos, Ioannis Panaretou, Alexandros Patsias, Christos Zaroliagis, Spyros Kontogiannis and Dimitris Tzempelikos*
**PRIVACY-AWARE REPUTATION SYSTEMS: AGENTIC DETECTION AND SANITIZATION OF SELF-DISCLOSURE IN ONLINE REVIEWS (F057)**
*Sandeep Kalari, Ravi Mukkamala and Stephan Olariu*

**13:00-14:15 Lunch Break**

**14:15-15:15 Session 25.5**
**Data Science in Health, Education, Finance, Government, and Industry**
**(Room: Eduardo Viana III)**
***Chair: Luiz Reni Trento***

**EMERGENCY TEAM TRAINING WITH VIRTUAL REALITY: SCOPING REVIEW (F044)**
*Sónia Viegas and Luís Velez Lapão*
**ENHANCING MULTIMORBIDITY MANAGEMENT IN PRIMARY CARE THROUGH THE INTEGRATION OF AI-DRIVEN PREDICTIVE MODELS WITHIN DIGITAL HEALTH PLATFORMS: A SCOPING REVIEW (F045)**
*Vicente Maia and Luís Velez Lapão*

**15:30 – Social Event (meeting point at the hotel lobby)**

# Monday 26th, October 2026

**09:00-13:15 Welcome Desk**
**(Room: Eduardo Viana IV)**

**09:30-11:00 Session 26.1**
**Digital Platforms**
**(Room: Eduardo Viana III)**
***Chair: Milorad Tosic***

**CATEGORIZATION OF CONTENT DELIVERED TO USERS OF DIFFERENT GENDERS ON YOUTUBE SHORTS (F044)**
*Arthur Garcia Torrezani, Kênia C. Gonçalves and Renato Miranda Filho*
**DIGITAL GOVERNMENT STRATEGIES TO REDUCE WAITING LISTS IN THE COSTA RICAN SOCIAL SECURITY SYSTEM: A MULTIDIMENSIONAL ANALYSIS (F060)**
*Alberto Mata-Rojas, Susan López-Aguilar, Daniel Rojas-Gómez and Roberto Cortés-Morales*
**WHY DO TEACHERS PARTICIPATE IN MOOCS? A STUDY OF GREEK EDUCATORS' MOTIVATIONS AND USER PROFILES (F017)**
*Ioanna Tzagkaraki, Ioannis Lefkos, Nikolaos Fachantidis and Marianthi Karatsiori*

**11:00-11:30 Coffee Break**

**11:30-12:30 Session 26.2**
**Digital Innovation and Data-Driven Transformation**
**(Room: Eduardo Viana III)**
***Chair: Amanda Pontes de Oliveira Ornelas***

**THE IMPERATIVE FOR UNIFORM REGULATORY REPORTING ACROSS GLOBAL SYSTEMICALLY IMPORTANT BANKING INSTITUTIONS: AN AI-ENABLED FRAMEWORK FOR INVESTOR CONFIDENCE AND CROSS-BORDER FINANCIAL TRANSPARENCY (F052)**
*Ranjani Balaji*
**SIMULATING 15-MINUTE CITY ACCESSIBILITY IN BARCELONA: INTEGRATING TOPOGRAPHY AND DEMOGRAPHIC DIVERSITY (F037)**
*Christopher Matienzo Chilo, Vladimir Estivill-Castro and Manuel Portela Charnejovsky*

**12:30 Best Paper Awards Ceremony and Closing Session**
**(Room: Eduardo Viana III)**

*Profs. Pedro Isaias and Paula Miranda*

## You are invited to check the virtual presentations below.

**Video Presentations**
**Online: Youtube**

**HARDWARE-AWARE SDN: VIRTUALIZING NIC OFFLOAD CAPABILITIES FOR LATENCY-CRITICAL EDGE APPLICATIONS (AC 2026 - F031)**
*Fatih Kihtir, Reza Hassanpour and Kasim Oztoprak*
**FORMALIZING AND IMPROVING EVENT LOG QUALITY: DETECTION AND CORRECTION FRAMEWORK IMPLEMENTED IN PROM (AC 2026 – F043)**
*Khouloud Guizani and Sonia Ayachi Ghannouchi*
**DIABETIC FOOT RISK ASSESSMENT AND PREDICTION USING ENSEMBLE MACHINE LEARNING (AC 2026 – F051)**
*Bakhtiar Amen, Sardasht Mahmood and Grigoris Antoniou*
**A HYBRID PROCESS MINING - BAYESIAN NETWORK -XGBOOST APPROACH FOR HUMAN RESOURCE OPTIMIZATION IN HEALTHCARE PROCESSES: AN HIV CARE PATHWAY CASE STUDY (AC 2026 – F053)**
*Nourhene Cherif and Sonia Ayachi Ghannouchi*
**FAIRCAL-FORMER: FAIR-CALIBRATED TEMPORAL EARLY WARNING WITH UNCERTAINTY-AWARE ABSTENTION (AC 2026 - F111)**
*Yitian Nie*
**DEVELOPMENT AND FUNCTIONAL EVALUATION OF A WEBAR- AND AI-BASED INTERACTIVE LEARNING GUIDE FOR COMPUTER HARDWARE EDUCATION (AC 2026 - F124)**
*Norjinbuu Baljinnyam and Tsogbadrakh Bat-Ulzii*
**THE ENVIRONMENTAL AND ECONOMIC IMPACTS OF LARGE-SCALE AI DATA CENTERS ON GLOBAL DIGITAL INFRASTRUCTURE (DSDI 2026 - F031)**
*Biancé Barnes and Hanlie Smuts*
**THE ROI OF RETRIEVAL AUGMENTED GENERATION: BALANCING COST, VALUE REALISATION, AND THE GOAL OF SCALABILITY IN ENTERPRISE LLM DEPLOYMENTS (DSDI 2026 - F055)**
*Rohini Naicker and Hanlie Smuts*