

DIGFORASP



**9th WORKING GROUP MEETING (WGM-2023)  
DIGFORASP COST ACTION 17124**

**Cádiz, Spain**

March 1<sup>st</sup> - 3<sup>rd</sup>, 2023



<b>WEDNESDAY 1<sup>st</sup></b> <b>Workshop DigForASP</b> <b>Location: Hotel Occidental Cádiz</b>	
8:30	Open Registration Desk
9:00–09:30	Inauguration
09:30–10:20	<b>Keynote Speaker - Pedro Cabalar</b> Title: Causal Explanations in Practical Knowledge Representation Chairperson: Jesús Medina
10:20–11:20	<b>Session 1.</b> Chairperson: Pedro Cabalar <i>Potential of lattice-valued framework and approximate solutions of relational equations in digital forensics.</i> Andreja Tepavcevic <i>Textual Fuzzy fingerprints in Digital Forensics.</i> Joao Paulo Carvalho <i>A Robust Fingerprint Identification Fuzzy System Using New Rotation Method and Adaptive Core-Distance Weighted Local Binary Pattern.</i> Laszlo T. Koczy
11:20–11:40	Coffee break
11:40–13:30	<b>Session 2.</b> Chairperson: Manuel Ojeda-Aciego <i>Classification and analysis of data on cryptocurrency transactions.</i> Piotr A. Kowalski and Joseph G. Vella <i>Experiences with GUHA data mining method in digital forensics</i> Esko Turunen <i>Comparative analysis of different models for detection and classification of malware using Machine and Deep Learning.</i> Vesna Dimitrova, Aleksandra Popovska Mitrovikj, Jovana Dobрева and Ana Gashtarova <i>Special methods for detection of time breaks and mining information from time series.</i> Vilem Novak <i>Spatial model-checking in medical imaging.</i> David Fernández-Duque
13:30–15:00	<b>Lunch</b>

WEDNESDAY 1<sup>st</sup> – Afternoon

## Workshop DigForASP

Location: Hotel Occidental Cádiz

15:00–15:40	<b>Keynote Speaker - Óscar Cordón</b> Title: Artificial Intelligence Applications in Forensic Anthropology and Human Identification Chairperson: Jesús Medina
15:40–16:40	<b>Session 3.</b> Chairperson: Óscar Cordón <i>Using Formal Concept Analysis for Malware Classification.</i> Domingo López-Rodríguez, Pablo Cordero and Angel Mora Bonilla <i>Choquet integral based crime index: a note on the construction of the interaction measure.</i> Maria Eugenia Cornejo Piñero, Jesús Medina, Andreja Tepavcevic, Ivana Stajner-Papuga and Aleksandra Dedinec <i>On a Hybrid Intuitionistic Fuzzy Method for Malware Classification.</i> Sotir Sotirov and Evdokia Sotirova
16:40–17:00	<b>Coffee break</b>
17:00–18:00	<b>Session 4.</b> Chairperson: M. Eugenia Cornejo <i>Universal intelligence metrics for measuring machine intelligence.</i> Laszlo Barna Iantovics <i>From Fuzzy Partitions to Reproducing Kernel Hilbert Spaces and their Feature Maps</i> Irina Perfilieva <i>Criminality in the surroundings of a football field</i> María Eugenia Cornejo Piñero, Jesús Medina and Francisco José Ocaña
19:00	<b>Welcome reception</b>

<b>THURSDAY 2<sup>nd</sup></b> <b>Workshop DigForASP</b> <b>Location: Hotel Occidental Cádiz</b>	
09:00–10:20	<b>Session 5.</b> Chairperson: Juan Carlos Nieves <i>Dimensions for Measuring the Intelligence of a City's Security</i> Antonio Díaz <i>Improvement in MRZ reading using fuzzy methods: passports.</i> José Manuel Rodríguez Jiménez and Manuel Ojeda-Aciego <i>Data privacy in criminal investigations.</i> David Billard <i>A collection of requests from Italian prosecutors in the Digital Forensics field.</i> Raffaele Olivieri
10:20–11:00	<b>Round table</b>
11:00–11:30	<b>Coffee break</b>
11:30–13:30	<b>Session 6.</b> Chairperson: Raffaele Olivieri <i>Answer Set Programming in the COST Action DigForASP: human rights and the problem of noise.</i> Stefania Costantini <i>Deception in Information-Seeking Dialogues</i> Juan Carlos Nieves Sanchez <i>Analyzing energy-efficiency of different-level VPN solutions in IoT networks.</i> Aleksandar Jevremovic <i>Digital Forensics challenges for evolving Smart Grid into interconnected infrastructure Internet of Energy.</i> Igor Kotsiuba <i>Artificial Intelligence for Cybersecurity in Resource-Constrained Smart Infrastructures: Applicability, Opportunities and Energy Modelling.</i> Andrii Shalaginov <i>Digital forensic by design in new urban mobility ecosystem.</i> Dragan Peraković and Ivan Cvitić
13:30–15:00	<b>Lunch</b>
15:00–17:00	<b>Working group parallel meetings</b> Chairperson: Stefania Costantini
17:00	<b>Tour</b>
20:00	<b>Dinner</b>

**FRIDAY 3<sup>rd</sup>****Workshop and Management Committee meeting****Location: Hotel Occidental Cádiz**

09:00–10:40	<b>Session 7.</b> Chairperson: Stefania Costantini
	<i>The role of modern technology in CERTs and LEAs cooperation in Serbia</i> Marko Krstic
	<i>Info Day at University of Montenegro.</i> Milena Djukanovic
	<i>A critical problem for the security and privacy of mobile phones: an exemplary approach and possible solution proposal for data cloning.</i> Yilmaz Aydin and Fatih Özkaynak
	<i>Understanding human behavior in the digital world: the role of cyberpsychology in digital forensics.</i> Tomislav Vazdar and Dijana Sedinić
	<i>Ethics and Law of Forensic Genealogy in Europe.</i> Mónika Nogel
10:40–11:00	Coffee break
11:00–11:40	<b>Legal/court aspects of AI-based methods in digital forensic investigations</b> Speakers: Nicolás Madrid, Dévika Pérez Authors: Aleksandar Jevremovic, Nicolás Madrid, Dévika Pérez, Piotr Kowalski and Stevan Gostojić Chairperson: Jesús Medina
11:40–12:30	<b>Working groups. Challenges, advances and deliverables</b> Chairpersons: Stefania Costantini, Jesús Medina
12:30–13:30	<b>Management Committee meeting</b> Venue: Hotel Occidental Cádiz
13:30 –14:30	<b>Lunch</b>
14:30 –16:00	<b>Management Committee meeting</b>