Program of the virtual edition of the 12th European Symposium on Computational Intelligence and Mathematics & Workshop DigForASP

February 15th - 17th, 2021

MONDAY 15th

9:00–9:15	Opening by the General Chairs: László T. Kóczy, Janusz Kacprzyk, Jesús Medina
9:15–10:15	**Session S1**. Chairperson: Vilém Novák
	Q-Fuzzy Subtopology Irina Perfilieva
	Lattice-valued algebraic structures via residuated maps Branimir Seselja and Andreja Tepavcevic
	Fuzzy relational mathematical morphology: erosion and dilation Alexander Sostak and Ingrida Uljane
10:15–10:30	Coffee break
10:30–12:10	**Session S2**. Chairperson: Jesús Medina
	Rough Sets and Topology in AST: a Study via Higher-order Fuzzy Logic Vilem Novak
	Identifying non-sublattice equivalence classes induced by an attribute reduction in FCA Roberto G. Aragón, Jesús Medina and Eloísa Ramírez-Poussa
	Extensions of fuzzy measures based on double generalization of the Lovász extension formula Lubomíra Horanská
	On the Intuitionistic Fuzzy Representations of Rough Real Functions Zoltán Ernő Csajbók
	Finite model property and varieties of BL-algebras Stefano Aguzzoli and Matteo Bianchi

	TUESDAY 16ᵗʰ
9:00–10:00	**Session S3**. Chairperson: Marek Reformat
	Automatic generation of linguistic descriptions of electricity consumption in the buildings of a large institution Juan Moreno-García, Luis Jiménez-Linares and Luis Rodríguez-Benítez
	On the selection the rule membership functions and fuzzy rule interpolation Szilvia Nagy, Ferenc Lilik, Brigita Sziová, Szonja Szujó and László T. Kóczy
	Linguistic descriptions of data via fuzzy formal concept analysis María Eugenia Cornejo, Jesús Medina and Clemente Rubio-Manzano
10:00–10:20	Coffee break
11:20–12:00	**Session S4**. Chairperson: László T. Kóczy
	OLGGA: An On-Line Generation-less Genetic Algorithm Antal Buss, Marek Reformat and Petr Musilek
	Some Dynamical Properties of Higher-Order Fuzzy Cognitive Maps Istvan Harmati and László T. Kóczy
	A Fuzzy Declarative Approach to Classify Unlabeled short texts based on Automatically Constructed WordNet Ontologies Sami H. Al-Sayadi, Pascual Julian-Iranzo, Francisco P. Romero and Fernando Saenz-Perez
	Automatic recognition of handwritten Urdu characters Hisham Zargar, Ruba Almahasneh and László T. Kóczy
	Algorithms for triggering general regression neural network Piotr A. Kowalski and Maciej Kusy

WEDNESDAY 17th	
9:00–10:00	**Session S5**. Chairperson: Stefania Costantini **Workshop DigForASP**
	Database Incident Response and Forensic Preparation through the Performance Features Maksym Nesterov, Igor Kotsiuba and Inna Skarga-Bandurova
	Detection of fraudulent credit card transactions by Computational Intelligence Models As a Tool in Digital Forensics Maciej Kusy and Piotr A. Kowalski
	Data Mining Techniques for the Analysis of Student's Admission Data Jurgita Lieponiene and Vaidas Giedrimas
10:00–10:20	Coffee break
10:20–11:40	**Session S6**. Chairperson: Jesús Medina **Workshop DigForASP. Abstracts session**
	Artificial intelligence between ethical and constitutional profile. The algorithm in judicial decisions: some cases of comparative law in comparison Tania Cerasella
	Evidence analysis through the Answer Set Programming Raffaele Olivieri
	AI and law: which prospects? (The importance of interdisciplinary and multidisciplinary dialogue) Emanuela Cerasella
	Towards Applications of Inductive Logic Programming in Digital Forensics Francesca Alessandra Lisi

The following papers were presented in October, 2020,

in the framework of the Vi-ESCIM2020.

Invariant aggregation and pre-aggregation functions
Anna Kolesárová and Radko Mesiar

Finite model property and varieties of BL-algebras
Stefano Aguzzoli and Matteo Bianchi

Collection integral on infinite spaces
Adam Šeliga and Alexandra Šipošová

Duhamel Hereditary Integrals in Viscoelasticity
Maria Minarova and Jozef Sumec

Weighted penalty-based aggregation
Andrea Stupnanova

Formal concept analysis for detecting criminal patterns
María Eugenia Cornejo, Roberto G. Aragón, Jesús Medina, Eloisa Ramírez Poussa and
Clemente Rubio-Manzano

Local Binary Pattern-based Fingerprint Matching
Boldizsár Tüű-Szabó, Gábor Kovács, Szilvia Nagy, Peter Foldesi and László T. Kóczy