

Acronym	Session	Paper ID	Title	Authors
LA	S 2.B1	3	Generalized Probability Distribution Mixture Model for Clustering	David Crespo-Roces, Iván Méndez-Jiménez, Sancho Salcedo-Sanz and Miguel Cárdenas Montes
LA	S 2.B2	4	A Hybrid Approach to Mining Conditions	Fernando O. Gallego and Rafael Corchuelo
HIA	S 1.A1	5	A Hybrid Deep Learning System of CNN and LRCN to Detect Cyberbullying from SNS Comments	Seok-Jun Bu and Sung-Bae Cho
LA	S 2.B1	6	A first attempt on Monotonic Training Set Selection	José-Ramón Cano and Salvador García
DMBD	S 1.A1	9	A Deep Learning-based Recommendation System to Enable End User Access to Financial Linked Knowledge	Luis Colombo-Mendoza, José Antonio García-Díaz, Juan Miguel Gómez-Berbís and Rafael Valencia-García
BMEC	S 3.A2	12	A Hybrid Genetic-Bootstrapping Approach to Link Resources in the Web of Data	Andrea Cimmino Arriaga and Rafael Corchuelo
VADP	S 1.B2	13	Evaluation of a Wrist-based Wearable Fall Detection Method	Samad Barri Kohjasteh, José Ramón Villar, Enrique de La Cal, Víctor M. González, Javier Sedano and Harun Resit Yazgan
BMEC	S 3.A2	14	Modelling and Forecasting 222Rn Radiation Level Time Series at Canfranc Underground Laboratory	Iván Méndez-Jimenez and Miguel Cárdenas Montes
BMEC	S 3.A2	16	Sensor fault detection and recovery methodology for a geothermal heat exchanger	Hector Alaiz-Moreton, Jose Luis Casteleiro-Roca, Laura Fernandez-Robles, Esteban Jove, Manuel Castejon-Limas and Jose Luis Calvo-Rolle
BMEC	S 3.A2	17	Distinctive Features of Asymmetric Neural Networks with Gabor Filters	Naohiro Ishii, Toshinori Deguchi, Masashi Kawaguchi and Hiroshi Sasaki
BMEC	S 3.A2	18	Tuning CNN input layout for IDS with Genetic Algorithms	Roberto Blanco, Juan Jesus Cilla Ugarte, Pedro Malagón, Ignacio Penas and Jose M. Moya
BMEC	S 3.A2	19	Improving the Accuracy of Prediction Applications by Efficient Tuning of Gradient Descent Using Genetic Algorithms	Arturo Durán Domínguez, Juan A. Gomez-Pulido and David Rodríguez Lozano
DMBD	S 1.A1	21	On the use of Random Discretization and Dimensionality Reduction in Ensembles for Big Data	Diego García-Gil, Sergio Ramírez-Gallego, Salvador García and Francisco Herrera
DMBD	S 2.A1	23	Hybrid Deep Learning based on GAN for Classifying BSR Noises from Invehicle Sensors	Jin-Young Kim, Seok-Jun Bu and Sung-Bae Cho
DMBD	S 1.A1	25	Inferring user expertise from social tagging in music recommender systems for streaming services	Diego Sánchez-Moreno, María N. Moreno-García, Nasim Sonboli, Bamshad Mobasher and Robin Burke
HIA	S 1.B1	28	Taxonomy-Based Detection of User Emotions for Advanced Artificial Intelligent Applications	Giovanni Pilato and Alfredo Cuzzocrea
VADP	S 1.B2	29	EnerVMAS: Virtual agent organizations to optimize energy consumption using intelligent temperature calibration	Alfonso González Briones, Javier Prieto, Juan M. Corchado and Yves Demazeau
LA	S 2.B1	31	Dealing with Missing Data and Uncertainty in the Context of Data Mining	Aliya Aleryani, Dr. Wenjia Wang and Dr. Beatriz De La Iglesia
DMA	S 1.A2	32	Listen to This: Music Recommendation Based on One-Class Support Vector Machine.	Fabio A. Yepes, Vivian F. López, Javier Pérez-Marcos, Ana B. Gil and Gabriel Villarrubia
VADP	S 1.B2	33	Tool wear estimation and visualization using image sensors in micro milling manufacturing	Laura Fernández-Robles, Noelia Charro, Lidia Sánchez-González, Hilde Pérez, Manuel Castejón-Limas and Javier Alfonso-Cendón
DMBD	S 1.A1	35	Learning Logical Definitions of n-ary Relations in Graph Databases	Furkan Goz and Alev Mutlu
DMA	S 1.A2	37	Improving forecasting using Information Fusion in local agricultural markets	Washington R. Padilla, Jesús García and José M. Molina
HIA	S 3.B2	38	Prediction of the energy demand of a hotel using an artificial intelligence-based model	Jose-Luis Casteleiro-Roca, Jose Francisco Gomez-Gonzalez, José Luis Calvo-Rolle, Esteban Jove, Héctor Quintián, Juan Francisco Acosta Martín, Sara González Pérez, Benjamin González Pérez, Francisco Calero García and Juan Albino
HIA	S 1.B1	39	A hybrid algorithm for the prediction of Computer Vision Syndrome in health personnel based on trees and evolutionary algorithms	Eva María Artime Ríos, Fernando Sánchez Lasheras, Ana Suárez Sánchez, Francisco Javier Iglesias Rodríguez and María Del Mar Seguí Crespo
DMBD	S 1.B1	40	GAparsimony: R package for searching parsimonious models by combining hyperparameter optimization and feature selection	Francisco Javier Martinez-De-Pison, Ruben Gonzalez-Sendino, Javier Ferreiro, Esteban Fraile and Alpha Pernia-Espinoza

HIA	S 1.B1	41	An algorithm based on satellite observations to quality control ground solar sensors: Analysis of Spanish meteorological networks	Ruben Urraca, Javier Antonanzas, Andres Sanz-Garcia, Alvaro Aldama and Francisco Javier Martinez-De-Pison
HIA	S 3.B1	42	Predicting global irradiance combining forecasting models through machine learning	Javier Huertas, Ricardo Aler, Inés María Galván, Clara Arbizu, Francisco Javier Rodríguez and David Pozo
BMEC	S 3.A2	43	Mono-modal Medical Image Registration with Coral Reef Optimization	Enrique Bermejo, Manuel Chica, Sergio Damas, Sancho Salcedo and Oscar Cordon
HIA	S 3.B1	44	A hybrid algorithm for the assessment of the influence of risk factors in the development of upper limb musculoskeletal disorders	Nélida M. Busto Serrano, Paulino J. García Nieto, Ana Suárez Sánchez, Fernando Sánchez Lasheras and Pedro Riesgo Fernández
BMEC	S 3.A2	45	Evaluating Feature Selection Robustness on High-Dimensional Data	Barbara Pes
DMBD	S 1.A1	46	Improving adaptive optics reconstructions with a deep learning approach	Sergio L. Suárez Gómez, Carlos González-Gutiérrez, Enrique Díez Alonso, María Luisa Sánchez Rodríguez, Jorge Carballido Landeira, Alastair Basden, James Osborn and Sergio L. Suárez Gómez, Carlos González-Gutiérrez, Enrique Díez Alonso, Jesús Daniel Santos Rodríguez, Laura Bonavera, Juan José Fernández Valdivia, José Manuel
VADP	S 1.B2	47	Compensating atmospheric turbulence with convolutional neural networks for defocused pupil image wave-front sensors	Sergio L. Suárez Gómez, Carlos González-Gutiérrez, Enrique Díez Alonso, Jesús Daniel Santos Rodríguez, Laura Bonavera, Juan José Fernández Valdivia, José Manuel
HIA	S 3.B1	48	Evolutionary Computation on Road Safety	Bruno Fernandes, Henrique Vicente, Jorge Ribeiro, Cesar Analide and José Neves
VADP	S 2.A2	49	Using nonlinear quantile regression for the estimation of software cost	Javier De Andrés, Manuel Landajo and Pedro Lorca
DMA	S 1.A2	50	Chord progressions selection based on song audio features	Noelia Rico and Irene Díaz
HIA	S 3.B1	51	Memetic Modified Cuckoo Search Algorithm with ASSRS for the SSCF Problem in Self-Similar Fractal Image Reconstruction	Akemi Galvez-Tomida, Andres Iglesias Prieto, Iztok Fister, Iztok Jr. Fister, Eneko Osaba and Javier Del Ser
HIA	S 3.B2	52	A Re-description Based Developmental Approach to the Generation of Value Functions for Cognitive Robots	Alejandro Romero, Francisco Bellas, Abraham Prieto and Richard J. Duro
HIA	S 3.B2	53	A hybrid iterated local search for solving a particular two-stage fixed-charge transportation problem	Ovidiu Cosma, Petrica Pop, Oliviu Matei and Ioana Zelina
LA	S 2.B1	54	A preliminary study of diversity in Extreme Learning Machines ensembles	Carlos Perales-González, Mariano Carbonero-Ruz, David Becerra-Alonso and Francisco Fernández-Navarro
VADP	S 2.A2	55	A Distributed Drone-Oriented Architecture for in-flight Object Detection	Diego Vaquero-Melchor, Ivan Campaña, Ana M. Bernardos, Luca Bergesio and Juan A. Besada
VADP	S 2.A2	56	3D Gabor Filters for chest segmentation in DCE-MRI	Ignacio Illan, Javier Perez-Matos, Javier Ramirez, Juan Manuel Gorriz, Simon Foo and Anke Meyer-Baese
DMBD	S 2.A1	57	Complexity of Rule Sets in Mining Incomplete Data Using Characteristic Sets and Generalized Maximal Consistent Blocks	Patrick G. Clark, Cheng Gao, Jerzy Grzymala-Busse, Teresa Mroczek and Rafal Niemiec
DMA	S 1.A2	58	LearnSec: A Framework for Full Text Analysis	Carlos Gonçalves, Eva Iglesias, Lourdes Borrajo, Rui Camacho, Adrian Vieira and Celia Gonçalves
VADP	S 2.A2	61	Fingertips segmentation of thermal images and its potential use in hand thermoregulation analysis	Andrés Eduardo Castro Ospina, Adriana Correa Mira, Israel David Herrera Granda, Diego Hernán Peluffo-Ordoñez and Hermes Fandiño
DMA	S 3.A1	64	A Mood Analysis on Youtube Comments and a Method for Improved Social Spam Detection	Enaitz Ezpeleta, Mikel Iturbe, Iñaki Garitano, Urko Zurutuza and Iñaki Velez de Mendizabal
DMBD	S 2.A1	65	Optimization of the university transportation by contraction hierarchies method and clustering algorithms	Israel David Herrera Granda, Leandro Leonardo Lorente Leyva, Diego Hernán Peluffo Ordoñez, Robert Mauricio Valencia Chapi, Yackleem Montero Santos, Jorge Luis Chicaiza Vaca and Andrés Eduardo Castro Ospina
DMA	S 3.A1	66	An improved comfort biased smart home load manager for grid connected homes under direct load control	Chukwuka Monyei and Serestina Viriri
DMBD	S 2.A1	67	Identification of patterns in blogosphere considering social positions of users and reciprocity of relations	Krzysztof Rudek and Jaroslaw Kozlak
HIA	S 3.B2	68	Change Detection in Multidimensional Data Streams with Efficient Tensor Subspace Model	Boguslaw Cyganek

LA	S 2.B1	70	Orthogonal Learning Firefly Algorithm	Tomas Kadavy, Michal Pluhacek, Adam Viktorin and Roman Senkerik
LA	S 2.B2	71	Multi-label learning by hyperparameters calibration fortreating class imbalance	Andrés Felipe Giraldo Forero, Andrés Felipe Cardona Escobar and Andrés Eduardo Castro Ospina
LA	S 2.B2	72	Drifted Data Stream Clustering Based on ClusTree Algorithm	Jakub Zgraja and Michal Wozniak
HIA	S 3.B2	73	A view of the state of the art of dialog systems	Leire Ozaeta and Manuel Grana
HIA	S 3.B2	74	An Adaptive Approach for Index Tuning with Learning Classifier Systems on Hybrid Storage Environments	Wendel Pedrozo, Júlio Nievola and Deborah Carvalho
DMA	S 3.A1	75	Remifentanyl dose prediction for patients during general anesthesia	Esteban Jove, Jose M. Gonzalez-Cava, José-Luis Casteleiro-Roca, Héctor Quintián, Juan Albino Méndez Pérez, José Luis Calvo-Rolle, Francisco Javier de Cos Juez, Ana León, María Martín and José Rehoso
DMA	S 3.A1	76	Classification of prostate cancer patients and healthy individuals by means of a hybrid algorithm combing SVM and evolutionary algorithms.	Juan Enrique Sánchez Lasheras, Fernando Sanchez Lasheras, Francisco Javier de Cos Juez and Carmen González Donquiles
DMBD	S 2.A1	77	SmartFD: A Real Big Data Application for Electrical Fraud Detection	David Gutiérrez-Avilés, José Antonio Fábregas, Javier Tejedor, Francisco Martínez-Álvarez, Alicia Troncoso, Ángel Arcos and José C. Riquelme
HIA	S 3.B2	78	Electrical Behavior Modeling of Solar Panels using Extreme Learning Machines	Jose Manuel Lopez-Guede, Jose Antonio Ramos-Hernanz, Julian Estevez, Asier Garmendia, Leyre Torre and Manuel Grana
LA	S 2.B2	80	Featuring the attributes in supervised machine learning	Antonio J. Tallón-Ballesteros, Luis Correia and Bing Xue
HIA	S 1.B1	81	A Hybrid Clustering Approach for Diagnosing Medical Diseases	Svetlana Simić, Zorana Banković, Dragan Simić and Svetislav D. Simić
LA	S 2.B2	82	Applying VorEAI for IoT Intrusion Detection	Nayat Sanchez-Pi, Luis Martí and Jose M. Molina
DMBD	S 2.A1	83	Multi-class imbalanced data oversampling for vertebral column pathologies classification	José A. Séez, Hector Quintian, Bartosz Krawczyk, Michal Wozniak and Emilio Corchado