Guest Editorial Preface

Special Issue on the International Conference on Business Intelligence (CBI'17)

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As a chairman of the international conference on Business Intelligence (CBI'17), I feel honored to have been given the opportunity to hold this prestigious international conference. The organizing committee has made elaborate plans for the success of this edition of CBI. The current edition of CBI was held at the city of Beni Mellal, Morocco, in an effort that was jointly by the Faculty of Sciences and Techniques, the laboratory of Information Processing and Decision Support and the association of Business Intelligence.

We received more than 100 articles. These items have been sent to members of the program committee for rigorous evaluation. The topics of accepted papers include pattern recognition, software engineering, data mining, data warehousing, telecommunications, signal & image processing.

The conference was an overwhelming success, with two invited talks, forty-four regular papers and thirty short papers being included in the conference program. After the conference, 8 papers were selected from the conference program and included in this special issue in Journal of Electronic Commerce in Organizations (JECO). These 8 papers, split into two separate issues, reflect different aspects of datamining, pattern recognition, and telecommunication.

The paper "A framework to secure medical image storage in cloud computing environment" by Marwan MBAREK propose a framework to secure the storage of medical image over cloud computing. A multi-region segmentation and watermarking techniques is used to maintain both confidentiality and integrity.

"Arabic Stemmer Based Big Data" by Youness MADANI parallelize a stemming algorithm for Arabic by proposing a distributed stemming algorithm in a big data system using the Hadoop framework, the MapReduce programming model for the development of the algorithm and the distributed file system HDFS for the storage of stemming result.

"Optimizing Ontology Alignments by using Neural NSGA-II" by Mohamed BINIZ presented a new hybrid approach based on a continuous Non-Dominated Sorting Genetic Algorithm II (NSGA-II) and neural networks to refine the alignment results. This approach consists of three phases: pre-alignment, alignment, and post-alignment.

"Switching of Wavelet Transforms by Neural Network for Image Compression" by Houda CHAKIB implement a neural network for image compression using the feature of wavelet transform. The idea is that a back-propagation neural network is trained to relate the image contents to its ideal compression method between two different wavelets transforms: orthogonal (Haar) and biorthogonal (bior4.4).

"Two-Dimensional Face Surface Analysis using Facial Feature Points Detection Approaches" by Rachid AHDID present two feature extraction methods for two-dimensional face recognition. The approaches are based on facial feature points detection by computing the Euclidean Distance between all pairs of this points for a first method (ED-FFP) and Geodesic Distance in the second approach (GD-FFP). These measures are employed as inputs to commonly used classification techniques such as Neural Networks (NN), k-Nearest Neighbor (KNN) and Support Vector Machines (SVM).

"Particle swarm optimization of BP-ANN based soft sensor for greenhouse climate" by Mohamed OUTANOUTE develop a Particle Swarm Optimization algorithm (PSO) in order to optimize the Back-Propagation-Neural Network (BP-NN) in order to elaborate an accurate dynamic model that can describe the behavior of the temperature and the relative humidity under an experimental greenhouse system. The PSO algorithm is applied to the BP-NN in the training phase to search optimal weights.

"Content based image retrieval method based on k-means clustering technique" by Mohamed OUHDA aims to provide an accurate result with lower computational time. For this purpose, a new method based on k-means clustering technique to match image's descriptors is applied.

"Segmentation of optic disc in fundus images using an Active Contour" by Abderrahmane ELBALAOUI presented an Optical Disk (OD) segmentation in retinal images. The method consists of localization of OD center, followed by elimination of vascular structure. Finally, an active contour model was applied to boundary OD segmentation.

We would like to thank authors for submitting their work for this special issue and all reviewers for dedicating their time and effort to the reviewing process. All thanks also for Journal of Electronic Commerce in Organizations (JECO) editor for accepting to publish this issue of the CBI'17 conference.

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