Guest Editorial Preface

Special Issue on Advance Computing Techniques and Systems

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The special issue on advance computing techniques and systems aims to presentment efficient computing solutions for today emerging problems. It's introducing number of new technologies in fields related to cloud computing, image processing, natural language processing and social networks analysis.

The lead article in this special issue is titled as "Image Mosaicing Using Binary Edge Detection Algorithm in a Cloud-Computing Environment." The authors used the Platform as a Service (PaaS) framework to provide a number of nodes in the cloud to run the computational intensive image processing and stitching algorithms. This increased the processing speed as most of image processing algorithms deal with every single pixel in the image. Message Passing Interface (MPI) is used for message passing among the compute-nodes in the cloud and a MapReduce technique is used for image distribution and collection, where the root node is used as reducer and the others as mappers. The second article titled as "Using Enhanced Lexicon-Based Approaches for the Determination of Aspect Categories and Their Polarities in Arabic Reviews." In this paper, the authors Aspect Based Sentiment Analysis (ABSA) for the Arabic language. Specifically, they consider two ABSA tasks: aspect category determination and aspect category polarity determination, and makes use of the publicly available human annotated Arabic dataset (HAAD) along with its baseline experiments conducted by HAAD providers.

The third paper titled as "Polarity Classification of Arabic Sentiments." This paper aims to present a new method to identify the polarity of Arabic reviews and comments whether they are written in Modern Standard Arabic (MSA), or one of the Arabic Dialects, and/or include Emoticons. The proposed method is called Detection of Arabic Sentiment Analysis Polarity (DASAP). The forth paper titled as "Cloud Security Threats and Techniques to Strengthen Cloud Computing Adoption Framework." In this paper, the authors aim to provide a framework that enables us to understand, current and future, security and privacy challenges with cloud computing by providing suitable solutions to identified challenges. The outcome of this study led to identification of total 18, current and future, security issues affecting several attributes of cloud computing.

The last paper is titled as "Privacy preserving Framework to Support Mobile Government Services" which aims at securing the M-Government administration interface to avoid possible security threats. The proposed framework comprises a set of different elements of business and technical components such as Front ending organizations portal, Interaction and transaction that are achieved through communication interfaces, Vertical & Horizontal integration channels, and M-government core platform that combines sectors can benefit of this services with administration interface.

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