Guest Editorial:
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This Special Issue of ISCA is a collection of six research papers. Each paper has been reviewed by at least two experts.

The papers in this special issue cover a broad range of research interests in the community of computers and their applications. The topics and main contributions of the papers are briefly summarized below.

Hadeer Hassan, Tamer Abdelkader, and Rania El Gohary have a paper entitled 'Social Recommendations using Dynamic profiles in Mobile Social Networks'. In this paper, they have addressed directed multicast protocols, in which message forwarding is conditional on predefined criteria. One of the key factors to improve routing performance in MSNs is to carefully select candidate relays. They exploit users' social profile and their interactions to improve relay recommendation and find target destinations. The proposed protocol, Time-based Encounter of Socially Similar nodes, TESS, uses the social proximity between nodes taking into consideration the time at which nodes encounter. The proposed protocol reduces power consumption and network overhead, while increasing delivery ratios compared to related protocols.

Koushik Maddali, Swathi Kaluvakuri, Indranil Roy, Nick Rahimi, Bidyut Gupta, and Narayan Debnath have a paper entitled 'A Comprehensive Study of some recent Proximity Awareness Models and Common-Interest Architectural Formulations among P2P Systems'. They have reviewed various p2p proximity-based clustering models and common-interest based network formulations. They have used both location proximity and common interest as the basis for clustering and these works take advantage of both the methodologies.

Mariam Hassanein, Sherine Rady, Wedad Hussein, and Tarek F. Gharib have a paper entitled 'Predicting the Dark Triad for social network users using their personality characteristics'. They have proposed a prediction method for those negative traits by analysing personality characteristics identified as the personal Values and Needs, which can be extracted from users' generated text on the social media. The proposed features are employed, single and combined, with various machine learning techniques for predicting the Triad classes. For adjusting trait binary classification, two marginal thresholds are tested: median-based split and reference-based split. The experimental study has shown that regression models using the proposed personality characteristics of Values and Needs features can classify the Dark Triad traits with an accuracy up to 70%, surpassing existing related work that employs traditional textual features. Moreover, the proposed features contributed to much lower-dimensional feature space with 92% savings, additionally, proving better processing for prediction the traits. Both the median-based and reference-based classification thresholds succeed in providing a discrete classifier with preference for the former.

Koushik Maddali, Indranil Roy, Swathi Kaluvakuri, Bidyut Gupta, and Narayan Debnath have a paper entitled 'Design of Broadcast Protocols for Non DHT-based Pyramid Tree P2P Architecture'. In this paper, they have considered a recently reported 2-layer non-DHT-based structured P2P network. They have first proposed a bandwidth efficient inter-cluster broadcast protocol for the architecture assuming that the layer-1 tree is a complete one. The protocol does not generate any duplicate packet. However, when the layer-1 tree is an incomplete one, the proposed protocol will generate only one duplicate packet per broadcast packet and the number of such duplicate packets is independent of the number of peers in the architecture. In either case, complexity of broadcasting is O(d) in terms of overlay hops, d being the number of levels of the tree; so, it is independent of the total number of peers present in the architecture.

Partha Ghosh, Deep Sadhu, Jyotsna Kumar Mandal, Narayan C. Debnath, and Soumya Sen have a paper entitled 'RHProphet: An Enhanced Sales Forecasting Model'. In this paper, they have chosen a new

forecasting model named Prophet that is designed mainly for social network analysis. It can be successful in the area of sales forecasting too if it considers customer-satisfaction as another parameter. They have proposed a modified Prophet model that emphasizes more upon customer satisfaction to perform the trend analysis. Experimental results reveal that the performance of the proposed methodology is better than the other standard models in practice.

Lobna A. Mady, Yasmine M. Afify, and Nagwa L. Badr have a paper entitled 'Biomedical Named Entity Recognition Using Structured Support Vector Machine'. They have thoroughly investigated the applicability of using structured support vector machine to classify biomedical named entity recognition. This is achieved by utilizing a combination of various types of features such as morphological, part of speech, orthographical, context and word representation to explore the classification performance. Comprehensive experiments have conducted on two popular datasets based on multiple evaluation metrics. Experimental results revealed that the performance of the structured support vector machine surpasses that of different benchmark approaches in the literature.

As a guest editor, I would like to express my genuine appreciation for the encouragement and support from the ISCA. I owe many thanks to the authors.

I hope you will enjoy this special issue and I look forward to seeing you at a future special issue of ISCA. More information about ISCA society can be found at https://www.isca-hq.org/isca.php?p=Journal.

Guest Editor:
Dr. Archana Patel, Eastern International University (EIU), Vietnam

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