

Editorial

This first issue of *CIT. Journal of Computing and Information Technology* conveys five papers from the regular section, which address topics in computer networks, relational databases, knowledge discovery in customer relationship management, and natural language processing.

Joyce Jose, Josna Jose and M. Princy in their paper titled *A Survey on Privacy Preserving Data Aggregation Protocols for Wireless Sensor Networks* study wireless sensor networks (WSNs) aiming to increase lifetime of sensor nodes. Specifically, the authors concentrate on data aggregation as a security enhancement without compromising energy efficiency. In the paper they provide a study of different privacy preserving data aggregation techniques used both to enhance energy and security, based on a number of attributes such as types of network nodes, topology and encryptions used for data aggregation.

The second paper in this issue deals with Cognitive Radio, an intelligent radio that can dynamically access the radio spectrum allowing use of licensed spectrum without interfering with the primary users, but whose performance depends on the properties of the frequency band. In their paper titled *A Review of Cross-layer Design in Dynamic Spectrum Access for Cognitive Radio Networks*, G. Shine Let and G. Josemin Bala provide a comprehensive survey of cross-layer design in cognitive radio network; they also describe the need for modifications in the current cross-layer design approaches.

Serhiy Morozov, Hossein Saiedian and Hanzhang Wang focus on labeling schemes for hierarchical data. They propose an interesting solution, which is an improvement of the well-known prime number labeling scheme, allowing multiple usage of the same prime numbers in the labeling process, thus producing smaller node labels. Their paper *Reusable Prime Number Labeling Scheme for Hierarchical Data Representation in Relational Databases* describes the respective algorithm. The proposed scheme can successfully be applied in situations where XML documents are stored in relational databases.

A Constraint Guided Progressive Sequential Mining Waterfall Model for CRM by Bhawna Mallick, Deepak Garg and P. S. Grover introduces a Constraint Guided Progressive Sequential Mining Waterfall (CGP-SMW) model for the knowledge discovery process, which can be used for keeping focus on mining the behaviors of customers in dynamic scenarios. The model is believed to help in finding efficient and effective useful patterns from the customers' data.

The last paper in this issue, titled *Rule-based Approach for Arabic Root Extraction: New Rules to Directly Extract Roots of Arabic Words*, is by Fatma Abu Hawas and Keith E. Emmert. The authors illustrate a new root-extraction approach for Arabic words, which relies only on the use of rules that benefit from the relationships among letters of a word, instead of relying on a database of word roots, a list of patterns, or even a list of prefixes and suffixes, as employed in the traditional approaches. Experimental results of this root extraction approach are promising, since about 96% of the current corpus contain long vowels, hence rules that can identify relationships among the long vowels and/or between the long vowels and the consonants could yield significant improvements.

I would like to take this opportunity to inform you that we will be missing three of our current Editors who are leaving the Editorial Board; these are Professors Ivan Futó, Eugenio Di Sciascio

and Andreas Holzinger. We would especially like to highlight the work of our long-term Editor Ivan Futó, as well as his continuing support to our publishing endeavor. His field of expertise within CIT will be taken over by Professor Andrea Kő. Additionally, the band wagon will be joined, in the role of Associate Editors, by a number of younger colleagues: Professors Siniša Šegvić, Jan Šnajder, Domen Verber, as well as our present Assistant Editor Mincong Tang.

Vlado Glavinić

Editor-in-Chief