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- The Fifth International Conference on the Applications of Digital Information and Web Technologies (ICADIWT)

## Editorial

For reducing the combined data overheads in packet networks, many methods have been proposed and tested in the recent past. In the paper on the authors took multiple optimum packet sizes associated with different message length ranges within the stream which is a departure from the earlier practice of a single optimum packet size for the reduction. The authors claim that the simulation investigations have proved that the new method leads to substantial reduction in the combined overhead factor.

Saving the energy consumption is a major challenge in the design and operation of Wireless Sensor Networks. To optimize it the authors Brahim Elbhiri, Sanaa El Fkihi, Ali Jorioz and Driss Aboutajdinez in the paper on **“Equitable Clustering algorithm for Wireless Sensor Networks based on the Spectral Classification”** have used the spectral clustering methods to propose the Equitable Clustering algorithm for Wireless Sensor Networks based on the Spectral Classification. Their protocol used the graph theory techniques and the spectral clustering to separate the network in a fixed optimal number of clusters where each called cluster head collects data and communicates the information to the base station. To know the empirical validity they did experiments and the simulation results documented that the proposed algorithm increases the lifetime of a whole network and presents more energy efficiency distribution compared to the Low-Energy Adaptive Clustering Hierarchy (LEACH) and the Centralized LEACH.

Ali Moussaoui, Fouzi Semchedine, Nabil Ben Mazouz, Mohamed Abdelli, Boualem Benziane in their paper on **“A New Scheme for Electing Stable MPR Nodes for the OLSR Protocol”** studied the nodes stability in Ad hoc routing protocols and they proposed a metric to assess the link stability between two adjacent nodes. The developed metrics is implemented in the Optimized Link State Routing protocol, to elect the most stable MPR nodes in the network. They have initiated the testing where the simulation results shown that the topology is more stable and the quality of the selected paths is improved.

The network partition prevents the communication between nodes and to enable the communication the author Varaprasad Golla has proposed a new routing model for mobile ad hoc networks to detect the critical link and network partition. The proposed model has been tested and simulated using NS-2.334 with the help of 100 nodes. The author claims that the proposed model has reduced the average number of network partition sizes.

In the last paper on A Green, Modular and Fair Packet Scheduler for Boosting Throughput over Wireless Links, the authors Maurizio Casoni, Carlo Augusto Grazia, Paolo Valente have studied the problem of defining and implementing a packet scheduler able to give the high performance of a wired packet scheduler over a wireless link. They have proposed and validate d a modular architecture which permits the use, as they are, of existing packet schedulers for wired links over wireless links.

The papers in this issue mark technical enhancement in networking.

## Editors