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Editorial

Special issue

The *Journal of Networking Technology* in this issue has presented the modified versions of the selected papers from the **ICITeS 2011** conference held at Tunisia in April 2011.

The papers address different important issues in networking in a broad sense. In the initial paper on “**Output Variation Compensation of Bandgap Voltage Reference for Efficient Calibration Strategy**”, *Rim Ayadi* and *Mohamed Masmoudi* have presented a approach for output variation compensation of bandgap voltage reference. The proposed technique is considered as an efficient calibration strategy for the BGR used to minimize the chip size and current consumption. *Ben Youssef Malek* and *Lbath Ahmed* in the second paper on “**Towards a method of design of real-time GeoProcessing Applications for Geospatial databases**” have highlighted the difficulties on the design issues of databases related to geospatial datasets. They presented the disadvantages of different existing methods and proposed profile UML dressing real time constraints in the field of real time geoprocessing applications.

Peer to peer environment currently is so important as we receive a large number of applications. *Sofiane Mounine HEMAM* and *Khaled Walid HIDOUCI* have proposed a decentralized approach to processing transactions in a replicated database, under partial replication in Peer-To-Peer (P2P) environments. In order to solve problems of concurrent updates, they proposed an architecture based on quorums where it allows assigning a unique timestamp to each distributed transaction in order to built local precedence order graph and to coordinate the distributed execution of the transaction. Two important problems in the wireless network are the unreliable wireless links and congestion that leads to degradation in the networks. The reliable transport protocol conception dealing with wireless links properties can significantly improve the performance of such networks. Realizing these problems *KAFI Mohamed Amine* and *TANDJAOUI Djamel* in their paper on “**A Novel transport protocol for wireless mesh networks**” have presented a novel transport protocol called MTCP which shows effective simulation results.

Ahlem SADDOUD, *Lamia FOURATI CHAARI* and *Lotfi KAMOUN* in their paper on “**Call Admission Control Scheme based on Quality of Service (QoS)**” stressed that the quality of service in the real time multimedia applications is a crucial problem. They proposed a Call Admission Control scheme based on QoS requirements of different traffic types in mobile WiMAX and they further claim that their proposed admission control scheme is suitable for real time applications as it gives more priority to real time service classes. Their experiments with numerical data shown that the proposed CAC scheme could be the better choice for admission control in terms of call blocking probability of the connections and bandwidth utilization of the system.

Mohamed Aissa, *Adel Ben Mnaouer* and *Abdelfettah Belghith* in this paper, “**A Delay and Delay Variation Constraint Multicast Algorithm in Heterogeneous Network**” studied the problem of QoS group communication in a heterogeneous network, which consists of multiple MANETs attached to the backbone Internet. To solve the DV BMT (Delay- and delay Variation- Bounded Multicast Tree) problem, they proposed a heuristic multicast algorithm called DDCMA (Delay and Delay Variation Constraint Multicast Algorithm). They generated impactful network algorithms to provide scalable and stable multicast services on the Internet. The algorithm defines QoS parameters as constraints on both delay and delay variation. Besides, they introduced a new Delay-Variation Estimation Scheme for heterogeneous networks, which can help DDCMA achieve better performance in terms of the multicast delay variation than some well known algorithms.

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Special Issue Editors