

**Contents**

Editorial i

**Research**

Hierarchical Fuzzy Controller for a Biped Robot-  
Abdallah Zaidi, Nizar Rokbani, Adel. M. Alimi 55

QoE Simulation Analysis of VoIP Traffic Support under Nakagami-m Fading Channels-  
Ramon Sanchez-Iborra, Maria-Dolores Cano, Joan Garcia-Haro 62

SecOPP+: A Secure Dynamic Scheme for Adding new Nodes in SecOPP Protocol-  
Hela Maddar, Abdelbasset trad, Abderrahmen Guermazi, Sofienne Ben Othman 74

Study the Effect of HARQ and MISO Technique on the EnodeB Performance of LTE System-  
Firas S. Al-Sharbaty, Safwan H. Fasola 81

**Book Review** 95

**Conference Notification** 97

- The Second International Conference on Future Generation Communication Technologies (FGCT 2013)
- The First International Conference on New Visions for Information and Communication Technology (ICNVICT 2013)

## Editorial

The application of fuzzy systems in humanoid robot has good scope as well as challenges. *Abdallah Zaidi, Nizar Rokbani and Adel. M. Alimi*, in their paper on **“Hierarchical Fuzzy Controller for a Biped Robot”** have used hierarchical fuzzy Controller for walking robots. The hierarchical fuzzy logic controller was used as command the system. They have presented the framework as well as the structure of the hierarchical fuzzy controllers.

The VoIP Communications have been growing in voluminous rate in the last few years due to wireless networks proliferation. The authors *Ramon Sanchez-Iborra, Maria-Dolores Cano, and Joan Garcia-Haro* in their paper on **“QoE Simulation Analysis of VoIP Traffic Support under Nakagami-m Fading Channels”** employed the Nakagami-m propagation model in order to evaluate the effect of fading channels on VoIP traffic for IEEE 802.11 systems and its influence on the Quality of user Experience (QoE). They conducted trials and observed that fading channels provoke a noticeable decrease in the system maximum capacity and coverage range. Besides, they also found that the VoIP communications suffer a noticeable drop on the achieved QoE in scenarios affected by fading channels, mainly affecting to low bit-rate codecs.

The secure routing protocol SecOPP provides the security support such as integrity, authentication, confidentiality and freshness of data. The authors *Hela Maddar, Abdelbasset Trad, Abderrahmen Guermazi and Sofienne Ben Othman* in their paper on **“SecOPP+: A Secure Dynamic Scheme for Adding new Nodes in SecOPP Protocol”** proposed to securely add new nodes on network to increase its longevity which is more reliable and robust. The outlined benefits are tested with simulation trials with TOSSIM using NesC language by the authors.

The authors in the next paper have used antenna elements at the transmitter side to improve the capability of the system with low complexity for the LTE system. *Firas S. Al-Sharbaty and Safwan H. Fasola* in the paper on **“Study the Effect of HARQ and MISO Technique on the EnodeB Performance of LTE System”** found that the block error rate (BLER) and the throughput of the system are improved when the HARQ procedure and MISO technique are employed together in a three cases study of the Channel Quality Indicator (CQI) of the user.

The papers published in this issue mark technical merits and enhancements.

## Editors