

EDITORIAL PREFACE

Nik Bessis, University of Derby, UK

The third issue of the sixth volume comprises five articles, selected after a careful review process, and is organized as follows.

In the first article, Fujisaki focuses on RFID tags and their use in a library catalogue. Author explains that such a system can be affected easily by neighboring environment and the resonant frequency, thus the communication performance can be degraded. In this paper, the author proposes the use of the 13.56MHz RFID system for the management of the library. In this way, they evaluate the influence that papers or other RFID tags give to the resonant frequency of an RFID tag.

In the second article, Kumata et al., focus on the difficulty of monitoring access points (APs) of Wireless Mesh Networks (WMNs). Authors explain that although there is much research on WMNs visualization, there are yet some problems including lack of dynamic information and past information. In this paper, authors propose an extended visualization system for WMNs called Mesh Net Viewer II (MNVII). MNVII can visualize not only network topology and link stability degree but also packet flow, route information and past information of WMNs. In the performance evaluation, authors provide evidence of improved visualization accuracy and real time characteristics of MNVII.

In the third article, Takayama and Miwa focus on evacuation systems in the event of a disaster. Authors emphasize the need for a

method for quickly determining evacuation routes and guiding people in accordance with the status of the locations of evacuation sites, the location of impassable road section, and the congestion caused by vast number of evacuees. However, in poor communication environments such as disaster area, since information distribution is very difficult and delays are inevitable, a method for determining evacuation routes must consider delays in information distribution. In this paper, authors propose a method of determining evacuation guidance routes in consideration of delays that occur in information distribution, and they evaluate the influence of the delays on evacuation guidance and the performance of the proposed method through simulation.

In the fourth paper, Seddiki and Benchaiba examine unstructured overlays such as P2P networks and social networks. In this paper, authors propose Gpop, a global file popularity measurement for unstructured P2P networks which considers both local knowledge of the peer and knowledge of the other peers participating in the network to gain a global-like knowledge. Simulation results strengthen their theoretical propositions and show that their measurement is closer to the real file popularity.

In the fifth paper, Sugita et al., extend their past work on ‘universal multimedia access’ by providing appropriate multimedia expressions according to users’ (mental and physical) abili-

ties, computer facilities, and network environments. In this extended approach, authors consider some switching functions such as user interface switching, media switching and QoS switching. Authors evaluated some types of user interfaces for different age groups and devices. Finally, they discuss the effectiveness of media switching and QoS Control functions and present the qualitative evaluation of multimedia contents for different media types and media quality.

The editor wishes to thank the authors for their contribution to this issue and the review-

ers for their useful suggestions and feedback to the authors. I wish readers found this issue useful in their research and academic activity.

Nik Bessis
Editor-in-Chief
IJDST

Nik Bessis is currently a Director of Distributed and Intelligent Systems (DISYS) research centre, a Professor and a Chair of Computer Science in the Department of Computing and Mathematics at University of Derby, UK. He obtained a BA (1991) from the TEI of Athens, Greece and completed his MA (1995) and PhD (2002) at De Montfort University (Leicester, UK). He is a Fellow of HEA and BCS and a Senior Member of IEEE. His research interest is in the area of inter-clouds, Internet of Things, and social graphs as a visualization technique for big data analytics. He is involved in and leading a number of funded research and commercial projects in these areas. Prof. Bessis has published over 200 papers, won 4 best paper awards and is the editor of several books and the Editor-in-Chief of the International Journal of Distributed Systems and Technologies (IJDST). In addition, Prof. Bessis is a regular reviewer and has served several times as a keynote speaker, conferences/workshops/ track chair, associate editor, session chair and scientific program committee member.