



# Introduction to Special Issue on: Mobile Applications

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**Preamble:** This is the second special issue of the International Journal of Computing and Digital Systems (IJCDs) that focuses on mobile applications, and publishes selected papers from the 2nd International Workshop on Mobile Applications (MobiApps 2015), 24-26 August 2015, Rome, Italy. MobiApps 2015 was held in conjunction with the 12th International Conference on Mobile Web and Intelligent Information Systems (MobiWIS 2015), and the 3rd International Conference on Future Internet of Things and Cloud (FiCloud 2015) [1, 2]. The first special issue on mobile applications has been published in July, 2015 [3, 4]. In the MobiApps 2015 workshop the technical committee accepted 7 papers from all submitted papers covering a wide range of topics related to the theme of mobile applications and mobile technologies [5-11]. From these papers, 4 have been selected to be submitted as extended versions in the special issue on mobile applications in the IJCDs journal [5-8], in addition to another four papers selected from normal submission to the IJCDs journal [12-15].

**Keywords:** mobile applications, android, cybersecurity, smart phones, mobile networks

## 1. INTRODUCTION

Mobile applications are growing fast both in number of devices and variety of applications. The development of mobile application is becoming more challenging with diverse platforms and their software development kits. Developers are migrating to cross-platform application development tools in order to reduce the cost of development and maximally reach users across several platforms [16]. The widespread uptake of mobile technologies has witnessed a re-structuring of the mobile market with major shifts in the predominance of particular firms and the emergence of new business models [10]. With the advance in mobile technology and the emergence of mobile devices such as tablets and smart phones, mobile applications are gaining a great interest from researchers and software developers to meet the needs of end users' mobile devices. We are witnessing an explosion of mobile applications targeting a wide range of fields and sectors such as business, healthcare, education, gaming, and interior design. This special issue on mobile applications covers a wide set of topics ranging from mobile application development to attack detection, security issues, and mobile networks.

In the following sections we discuss the different topics covered in this special issue.

## 2. SELECTED PAPERS FROM MOBIAPPS 2015

In this section we discuss the four papers selected from MobiApps 2015. The authors in [5] present some of the challenges that exist when trying to implement assisted living systems on a mobile platform. Such an implementation is very important due to ubiquitous use of smartphones and tablets [17]. Authors of this article developed an application for android devices porting the windows PC algorithms to Android devices and evaluated their performance [18]. They also discussed the technical details related to the development of various blind source separation algorithms on a mobile platform. These algorithms are then evaluated in terms of execution time [19]. In [6], the authors proposed a fuzzy logic based algorithm to decide whether to offload the computation to cloud or device, it showed some energy saving compared to results in [20]. The authors focused on offloading computation to the cloud in a strategic way to ensure optimum utilization of mobile device resources [21]. They used the MATLAB® fuzzy toolbox to implement their algorithm, which considered network conditions, mobile device energy, user inputs, and dynamically decides whether to offload the computation to the cloud or not. The authors compared the algorithm proposed with previous approaches [22]. A multi-platform mobile application was discussed in [7], which provided a solution for the recovery of lost objects. Whenever any person lost or found any object, he or she



can report lost and found objects through their mobile phones by using mobile application rather than other procedure of filling up forms. In addition, it has a backend server that runs an algorithm for object matching using SURF features to match images of lost items with that of found items [23]. The author in [8] presented design guidelines for developing mobile application prototypes for mobile edutainment, with application to Museums. They used Game Based Edutainment System (learning by entertainment) to stimulate users' interest, and presented a concrete example on Mao Gong Ding inscriptions and Qingming Painting presented in the National Palace Museum, Taipei, Taiwan [24].

### 3. SELECTED PAPERS FROM NORMAL SUBMISSION

The authors of paper [12] presented a model aimed at detecting attacks targeting the application layer of the victim and working over the TCP transport protocol. With this model the authors extrapolated information potentially capable of detecting the executed threats. The paper discussed the state of the art of this kind of problems, described the process, and showed some results in order to prove the effectiveness of the proposed method simulating a real scenario [25]. The article presented in [13] overviewed security issues and proposed a set of methods on how to avoid such issues in converged web and mobile based applications. The paper addressed security in mobile web-based applications, it gave a brief but good study of the major pitfalls and threats in converged web and mobile applications [26]. Paper [14] described methods for secure mobile transactions where the payer and payee use a third party for transactions, this reduces the need for these two sides to have a common secret for encryption/authentication [27]. In [15], the authors presented various channel models including outdoor Stochastic Spatial Clustered (OSSC) Channel Model that have been implemented to investigate and optimize the capacity of different case studies of Amplify and Forward Relay MIMO systems. The authors implemented different channel models to investigate and optimize the capacity of Amplify and Forward Relay MIMO systems. They introduced comparative studies for optimum cases for different MIMO antenna configurations with uniform linear arrays and uniform circular arrays with antenna spacing and the antenna structure [28].

### REFERENCES

- [1] W. El-Medany and S. Loucif, "Message from the MobiApps-2015 Chairs."
- [2] W. M. El-Medany, S. Loucif, R. Stanica, B. Darties, N. Zaman, J. Merja, A. Tetlay, B. Cristea, A. S. Peng, and P. Gil, "MobiApps-2015 Organizing Committee Workshop Co-Chairs."
- [3] M. Eltoweissy, W. M. El-Medany, and S. Loucif, "Special Issue on Mobile Applications," *Int. J. Com. Dig. Sys.*, vol. 4, 2015.
- [4] "Advance Program of FiCloud 2015, OBD 2015, and MobiWis 2015," in *The 12th International Conference on Mobile Web and Intelligent Information Systems*, Rome, Italy, 2015.
- [5] M. C. Offiah and M. Borschbach, "Mobile Porting and Multi-platform Runtime Performance Comparisons of Offline and Online BSS Algorithms," in *Future Internet of Things and Cloud (FiCloud), 2015 3rd International Conference on*, 2015, pp. 633-638.
- [6] S. Karim and J. J. Prevost, "Efficient Mobile Computation Using the Cloud," in *Future Internet of Things and Cloud (FiCloud), 2015 3rd International Conference on*, 2015, pp. 620-626.
- [7] M. Ghazal, F. Haneefa, S. Ali, Y. Alkhalil, and E. Rashed, "Mobile-Based Archival and Retrieval of Missing Objects Using Image Matching," in *Future Internet of Things and Cloud (FiCloud), 2015 3rd International Conference on*, 2015, pp. 627-632.
- [8] Y.-N. Lien, "Mobile Edutainment System–National Palace Museum as An Example," presented at the 3rd International Conference on Future Internet of Things and Cloud (FiCloud), Rome, Italy, 2015.
- [9] F. Benedetto and A. Tedeschi, "Moisture Content Evaluation for Road Surfaces Monitoring by GPR Image and Data Processing on Mobile Platforms," in *Future Internet of Things and Cloud (FiCloud), 2015 3rd International Conference on*, 2015, pp. 602-607.
- [10] A. Tedeschi, F. R. Fulginei, and A. Laudani, "PV Panel Modeling: A Mobile Application for Modeling Photovoltaic Panels Using Datasheets Information," in *Future Internet of Things and Cloud (FiCloud), 2015 3rd International Conference on*, 2015, pp. 608-613.
- [11] P. Farina, E. Cambiaso, G. Papaleo, and M. Aiello, "Understanding DDoS Attacks from Mobile Devices," in *Future Internet of Things and Cloud (FiCloud), 2015 3rd International Conference on*, 2015, pp. 614-619.

- [12] Enrico Cambiaso, Gianluca Papaleo, Giovanni Chiola, and a. M. Aiello, "A Network Traffic Representation Model for Detecting Application Layer Attacks," *Int. J. Com. Dig. Sys.*, <http://dx.doi.org/10.12785/ijcds/050104>, vol. 5, 2016.
- [13] Devotha Nyambo, Zaipuna Yonah, and a. C. Tarimo, "On the Identification of Required Security Controls Suitable for Converged Web and Mobile Applications," *int. J. Com. Dig. Sys.*, <http://dx.doi.org/10.12785/ijcds/050105>, vol. 5, Jan 1, 2016 2016.
- [14] Aly M. Elsemari, Abdullah A. AlAnoor, Ahmad A. Alshammari, and a. A. E. Aljohani, "Secure Hybrid Payment System in KSA," *Int. J. Com. Dig. Sys.*, <http://dx.doi.org/10.12785/ijcds/050106>, vol. 5, Jan 2016.
- [15] R. Mesmar and M. A. Mangoud, "Capacity Analysis for Cooperative Amplify and Forward Relay MIMO in Correlated Channels," *Int. J. Com. Dig. Sys.*, <http://dx.doi.org/10.12785/ijcds/050108>, vol. 5, Jan 2016.
- [16] I. Dalmaso, S. K. Datta, C. Bonnet, and N. Nikaein, "Survey, comparison and evaluation of cross platform mobile application development tools," in *Wireless Communications and Mobile Computing Conference (IWCMC), 2013 9th International*, 2013, pp. 323-328.
- [17] A. Khawar, "awais@vt.edu," *Cognitive RF, Federated Wireless, USA*
- [18] P. Khethavath, "praveen.khethavath@gmail.com," *MEC, LaGuardia Community College, USA*.
- [19] E. B. Hamida, "elyes.benhamida@gmail.com," *Qatar Mobility Innovations Center (QMIC), Qatar*.
- [20] B.-G. Chun, S. Ihm, P. Maniatis, M. Naik, and A. Patti, "Clonecloud: elastic execution between mobile device and cloud," in *Proceedings of the sixth conference on Computer systems*, 2011, pp. 301-314.
- [21] E. Zeydan, "engin.zeydan@ieee.org," *R&D Directorate AveaLabs, AveaLabs, AVEA Communication Services, Turkey*.
- [22] W. Yue, "yue@konan-u.ac.jp," *Intelligence and Informatics, Konan University, Japan*.
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