Journal of Computers

Special Issue on Mobile Commerce

FOREWORD

The recent developments of mobile, ubiquitous, and pervasive technologies have generated a wide range of opportunities for enhancing physical marketplaces and for pushing traditional commerce beyond physical locations of stores or shopping malls. The special session is intended to foster the dissemination of state-of-the-art research in the field of mobile commerce. We have nine high quality papers included in this special issue. These papers are selected from many outstanding submissions after careful reviewing processes by the editorial committee of this special issue. The scope of these papers covers several topics including wireless security, privacy, transaction mechanism, RFID authentication, M-learning, and M-commerce. In the first paper, Prof. Shu-Ting Chuang proposed a novel mechanism to examine the underlying dimensions of the mobile services. The results reveal that four mobile service constructs positively and significantly influence theme park guests' perceived mobility value. In the second paper, Prof. Yu-Yi Chen introduced a Lightweight RFID Anti-Counterfeiting Mechanism. The new mechanism can be implemented over low-cost devices for guaranteeing the authenticity of products in global marketplace. In the third paper, Prof. Hung-Yu Chien presented a new authentication protocol for reader-server channel using ID-based cryptography from elliptic curves. The new scheme can effectively confirm the security property and enhance communication performance. In the fourth paper, Prof. Jason C. Hung proposed an adaptive caching and presentation mechanism to enhance the M-learning market. The new method has taken the multimedia resources into consideration and utilized the non-synchronous caching algorithm to solve the streaming problems. In the fifth paper, Dr. S.K Chaharsooghi gave a discussion on the evaluation of mobile commerce adoption in Iran to help us learn the practical risks. In the sixth paper, Prof. Chun-I Fan designed an interesting application of e-commerce. The new method can not only confirm the anonymous property but also achieve fairness and robustness simultaneously. In the seventh article, Prof. Hung-Min Sun proposed two RFID authentication schemes for the reader-portable environment. These schemes not only provide a novel usage of RFID system, but resolve privacy threats while a mobile reader is not authorized to acquire every tag's information. In the eighth paper, Prof. Ya-Fen Chang employed the concept of oblivious transfer to design a message extraction system. The low computational cost allows the new system to be applied to mobile device for preserving the privacy of subscribers. In the last paper, Prof. Shiuh-Jeng Wang presented an image based signature verification scheme for shopping in E-commerce systems. We wish that this special issue serves as good reference for beginner in this active research field. On behalf of the editorial committee, I would like to appreciate all the authors and reviewers for their great efforts and contributions to this special issue. I am also grateful to the editorial committee members for their excellent contributions.

Thank you very much for your interest on this special issue.

Jung-San Lee, Guest Editor

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