Guest Editorial: Selected Papers from IEEE IEEE/EAI CollaborateCom 2013

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This issue of EAI Transactions on Collaborative Computing includes extended versions of articles selected from the program of the 9th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom 2013), which was held during October 20-23, 2013, in Austin, Texas USA. The final program had 20 research papers, 23 application papers, 2 industry papers, 11 invited papers, 3 keynotes, 2 panels, and 2 full day workshops. Five research papers were invited for submission for this special issue of EAI Transactions on Collaborative Computing.

The journal submissions were substantially extended and went through an additional review process by selected members of the CollaborateCom 2013 program committee as well as external reviewers.

The first article “Is Email Business Dying?: A Study on Evolution of Email Spam Over Fifteen Years”, by De Wang, Danesh Irani, and Calton Pu, analyses 5.5 million spam emails over 15 years (1998 – 2013) and explores the real trend of email spam. The paper uses the topic modelling and network analysis techniques to understand the behaviours of spammers. The paper concludes that the email spam business is still alive and has become more capricious. It is also found that spammers changed topics over time to attract users.

The second article “A Game Theoretic Approach for Modeling Privacy Settings of an Online Social Network”, by Jundong Chen, Ankunda Kiremire, Matthias Brust, and Vir Phoha, studies the privacy settings in social networks analyzing the behavior of users using a variety of factors such as attribute importance, benefit, risk and network topology. The paper uses a game-theoretical model that enables users to adjust their privacy settings according to certain strategy options. The results show that the most important attributes exhibit higher levels of revelation than the least important attributes. The paper also found that the network topology exhibits a considerable effect on the privacy in an environment with high level of risks.

The third article “A Collaborative Virtual Workspace for Factory Configuration and Evaluation” by Ingo Zinnikus, Sergiy Byelozzyrov, Xiaoxi Cao, Matthias Klusch, Christopher Krauss, Andreas Nonnengart, Torsten Spieldenner, Stefan Warwas, and Philipp Sulisallek, presents a collaborative, synchronized web-based framework to create 3D scenarios for product design, simulation and training assisted by animated avatars. The paper uses the service-oriented approach which enables easy extension of the framework by developing plugins and adapting it to specific use-case scenarios.

The fourth article “MOSDEN: A Scalable Mobile Collaborative Platform for Opportunistic Sensing Applications” by Prem Prakash Jayaraman, Charith Perera, Dimitrios Georgakopoulos, and Arkady Zaslavsky, proposes a mobile collaborative platform called MOSDEN that enables and supports opportunistic sensing at run time. The key features of the platform include: capturing and sharing sensor data across multiple applications, devices and users; supporting separation of sensors from application-specific processing, storing and sharing; promotion of reuse and re-purposing of sensor data. The proposed framework has been implemented on Android-based smartphones and tablets.

The fifth article “Harnessing Context for Vandalism Detection in Wikipedia” by Lakshmish Ramaswamy, Raga Sowmya Tummalapenta, Deepika Sethi, Kang Li, and Calton Pu, proposes a context-based vandalism detection framework for Wikipedia to detect the vandalism. This paper identifies two distinct types of context that are potentially valuable for vandalism detection, namely content-context and contributor-context, and use them in their framework. Their experimental results show that the accuracy of vandalism detection can be improved significantly by utilizing context.

We strongly believe the readers will find these papers interesting and useful, and we hope that they will enjoy them.