Editorial for Crowdsensing and Intelligent Sensing on Mobile Media Analytics Special Issue

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Published online: 27 December 2016
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Editorial:

This special issue features six selected papers with high quality from the Papers from the workshop “Crowdsensing and intelligent Sensing on Mobile Media Analytics (SMMA 2016)” related to 9th EAI INTERNATIONAL CONFERENCE ON MOBILE MULTIMEDIA COMMUNICATIONS (MOBIMEDIA 2016), which was held in Xi’An, China, June 16–18, 2016.

Xu et al. [1] proposed method focuses on the step for storytelling of urban emergency events: given the Weibo posts related to a detected urban emergency event, the proposed method targets at mining the multi-modal information (e.g., images, videos, and texts), as well as storytelling the event precisely and concisely. Zhang et al. [2] proposed a micro-blog topic recommendation system which can give corresponding suggestions/strategies for users. The recommendation algorithm is presented to realize Micro-blog topic personalized recommendation within user clustering set. Experiments show that our proposed recommendation system has a good accuracy which is up to 50.2%. Cahyani et al. [3] highlight the importance of mobile forensics in the investigation of such activities. Specifically, using a series of controlled experiments on Android and Windows devices, authors

demonstrate how mobile forensics techniques can be used to recover evidentiary artefacts from client devices. Liu and Zheng [4] investigated the channel estimation based inter-carrier interference (ICI) cancellation algorithm elimination of the orthogonal frequency division multiplexing (OFDM) system. Compared to the traditional technologies, this new algorithm would be processed as part of ICI as noise, and to reduce the effects of interference between the carrier frequencies offset by simultaneous judgment and impulse channel frequency response (CFR). Wang et al. [5] extends the FP-Growth algorithm to mine both positive and negative frequent patterns, namely the PNFP-Growth framework. The extended approach also adopts a prune strategy to filter out misleading patterns to the most by correlating the negative data items and the positive ones. Yao et al. [6] study the time minimization task assignment problem in mobile crowdsensing. Specially, authors propose offline and online algorithms based on historic encounter information and real-time assigned task execution time, respectively.

The guest editors are thankful to our reviewers for their effort in reviewing the manuscripts. We also thank the Editor-in-Chief, Dr. Imrich Chlamtac for his supportive guidance during the entire process.

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References

1. Xu Z, Liu Y, Zhang H, Luo X, Mei L, Hu C (2016) Building the multi-modal storytelling of urban emergency events based on crowdsensing of social media analytics. *Mobile Netw Appl*. doi:10.1007/s11036-016-0789-2
2. Zhang S, Zhang S, Yen NY, Zhu G (2016) The recommendation system of Microblog topic based on user clustering. *Mobile Netw Appl*. doi:10.1007/s11036-016-0790-9

3. Cahyani NDW, Rahman NHA, Glisson WB, Choo KKR (2016) The role of mobile forensics in terrorism investigations involving the use of cloud storage service and communication apps. *Mobile Netw Appl*. doi:[10.1007/s11036-016-0791-8](https://doi.org/10.1007/s11036-016-0791-8)
4. Liu R, Zheng E (2016) Research on the intelligent signal channel sensing based ICI elimination algorithm of the OFDM system. *Mobile Netw Appl*. doi:[10.1007/s11036-016-0792-7](https://doi.org/10.1007/s11036-016-0792-7)
5. Wang B, Chen D, Shi B, Zhang J, Duan Y, Chen J, Hu R (2016) Comprehensive association rules mining of health examination data with an extended FP-growth method. *Mobile Netw Appl*. doi:[10.1007/s11036-016-0793-6](https://doi.org/10.1007/s11036-016-0793-6)
6. Yao H, Xiong M, Liu C, Liang Q (2016) Encounter probability aware task assignment in mobile crowdsensing. *Mobile Netw Appl*. doi:[10.1007/s11036-016-0794-5](https://doi.org/10.1007/s11036-016-0794-5)

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