

Editorial Preface

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Liang-Jie Zhang, Kingdee International Software Group Company Limited, Shenzhen, China

Yutao Ma, State Key Laboratory of Software Engineering, Wuhan University, Wuhan, China

Internet of Things (IoT) Service is an emerging cross-field among multiple disciplines, such as IoT, Services Computing, and Big Data, and a promising paradigm that leverages both science and technology to realize the value of connected things, people, and cyberspace. The emergence of such a new paradigm is shaping IoT and IoT-related techniques to enable larger-scale and more pervasive IoT applications and innovations. This special issue contains 10 top-ranked papers from the First International Conference on Internet of Things (S2 ICIOT 2016). A part of 5 papers were published in volume 14, issue 2. This part includes the following 5 research papers:

- In the first paper entitled “A Proactive Service Model Facilitating Stream Data Fusion and Correlation”, Han et al. propose a novel service model to transform and correlate massive stream data, which shows the potential of implementing various middle-way programmable nodes to form larger-granularity and software-defined “sensors” in IoT contexts.
- In the second paper entitled “Privacy Protection for Data-Driven Smart Manufacturing Systems”, Wong and Kim propose possible technical solutions to hide sensitive information and discuss some privacy management techniques in smart manufacturing systems.
- In the third paper entitled “A Constrained Learning Approach to the Prediction of Reliability Ranking for WSN Services”, Xiong et al. proposes an approach to constrained learning prediction of reliability ranking for wireless sensor network services.
- In the fourth paper entitled “The Performance of Location Aware Shilling Attacks in Web Service Recommendation”, Gao et al. construct three types of location-aware shilling attack (LASA) models, and compare the effects of classical shilling attack (CSA) models and LASA models on location-aware collaborative filtering through injecting attack profiles generated by these models.
- In the fifth paper entitled “Distributed Top-K Join Queries Optimizing for RDF Datasets”, Gu et al. propose a top- k query plan Spark threshold algorithm to reduce the connection operation of RDF data, and present a better Spark simple join algorithm to reduce the sorting related operations for intermediate data.

Liang-Jie Zhang

Editor-in-Chief

Yutao Ma

Guest Editor

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Liang-Jie (LJ) Zhang received his PhD on Pattern Recognition and Intelligent Control from Tsinghua University. Currently he is the Chief Technology Officer (CTO) and Senior Vice President of Kingdee International Software Group Company Limited. Dr. Zhang has published more than 160 technical papers in journals, book chapters, and conference proceedings. He has 50 granted patents. He was elected as an IEEE Fellow in 2011, and in the same year won the Technical Achievement Award “for pioneering contributions to Application Design Techniques in Services Computing” from IEEE Computer Society. He has served as the President of Shenzhen Big Data Alliance since 2013. Dr. Zhang is the Editor-in-Chief of the International Journal of Web Services Research (IJWSR).

Yutao Ma received his PhD degree in 2007 from Wuhan University. He is currently an Associate Professor in the School of Computer Science, Wuhan University. Dr. Ma was with the Institute of China Electronic System Engineering Corporation (Beijing) as a post-doctoral fellow, and was a visiting scholar in the Department of Electronic and Computer Engineering, Lehigh University. His research focus is on the development and maintenance of large-scale software service systems and complex networks. He is now a senior member of CCF and a member of ACM and IEEE.