
Editorial

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Biographical notes: Yi-Cheng Chen received his PhD in the Department of Computer Science at National Chiao Tung University (NCTU), Taiwan, in 2012. Currently, he is an Assistant Professor in the Department of Information Management and also Chairman of Computer Center in National Central University (NCU), Taiwan. He has been active in international academic activities, as conference organiser and journal editor/reviewer. He published some papers in several prestigious conferences and journal, such as IEEE ICDE, IEEE ICDM, ACM CIKM, *IEEE TKDE* and *ACM TIST*. His research interests include data mining, social network analysis, machine learning and cloud computing.

Nam Ling received his MS and PhD from the University of Louisiana, Lafayette, USA. He is a Wilmot J. Nicholson Family Chair Professor (University Endowed Chair) of the Santa Clara University, USA and Chair of its Department of Computer Science and Engineering. He has been the Associate Dean for its School of Engineering. He has more than 200 publications (including books) in video/image coding and systolic arrays. He also has seven adopted standards contributions and has filed/granted more than 20 US/European/PCT patents. He is an IEEE Fellow due to his contributions to video coding algorithms and architectures. He is also an IET Fellow.

The web of things (WoT) is software architectural styles and programming patterns that allow real-world objects to be part of the World Wide Web. We all witness many innovative web services and intelligent data processing technologies evolved and reshaped on the WoT environments. This special issue focuses on covering the most recent research results on WoT and its intelligent data processing services. Following an open call for papers, four papers that comprise this special issue were selected. These four articles provide novel, interesting and useful results.

The paper ‘Data analysis of simulated WoT-based anti-crime scenario’ by Chih-Chi Kuang, Kuei Min Wang, Lin Hui, Chuan-Yu Chang and Kuang Hui Chiu has

made a unique contribution on a novel configuration of WoT equipped on rescue squad force for supporting the police work in freeing hostages from terrorists. In the process, Monte Carlo simulation has been built and used to run the specific scenario for having the outcome of measure of effectiveness (MOE), which is the expected successful mission rate for alternatives. Compared to the traditional force, the WoT-based force can significantly improve the effectiveness of hostage's rescue action.

A quadratic filter model based on clustering kernel is proposed to deeply dig the internal relation of data and improve the accuracy of data processing in the paper 'A quadratic fusion estimating model based on the clustering kernel for real-time data in web of things' by Chao Li, Zhenjiang Zhang, Yingsi Zhao, Peng Zhang and Bo Shen. This model introduces the concept of cluster attractor and performs quadratic filtering on the data to further remove the data noise and improved the accuracy of the data. Simulation analyses show that the proposed model can improve the accuracy of data under certain conditions and make the data distribution in the same cluster more centralised.

Jianqiang Li, Yu Guan, Xi Xu, Yan Pei, Jason C. Hung and Weiliang Qiu in the paper 'Association between alcohol consumption and telomere length', performed a meta-analysis and identified 21 eligible articles (including 27 analyses published between 2006 and 2016, total sample size 35,891). The relationship between alcohol consumption and telomere length is found to be significant (with Fisher's combined p-value = $3.52E-8$ and Liptak's weighted p-value = $8.24E-3$). Whether this relationship is significant varies with study type (cohort, case-control or cross-sectional) and study population (Europe, Asia, American or Australia). Alcohol consumption is associated with telomere length, deduced by combined evidence.

In the paper 'QoS-prioritised media delivery with adaptive data throughput in IoT-based home networks', authors by Chih-Lin Hu, Liang-Xing Kuo, Yung-Hui Chen, Thitinan Tantidham and Pattanasak Mongkolwat propose a QoS-prioritised media delivery mechanism with adaptive data throughput. The mechanism design includes several functions: assigning weights of relative importance to home service types, adjusting media quality of home services, reducing data workload against traffic congestion, and fairly distributing free bandwidth to prioritised home services. Their research fulfils a simplified proof-of-concept implementation in a small-scaled IoT-based home network. The proposed mechanism can sustain QoS differentiation and user satisfaction with comfortable media playing quality.

This editorial message not only delineates the paper submission and reviewing process, but also sincerely appreciates the authors' patience for paper revisions, the reviewers' devotion and time commitment necessary to assure the high quality of these articles. Finally, we would like to thank Dr. David Taniar, the Editor-in-Chief, and the journal staffs of *IJWGS* for providing important advices and suggestions during the entire process of assembling this special section.