Editorial

Gary K.W. Wong*

Faculty of Education,
The University of Hong Kong,
Hong Kong
Email: wongkwg@hku.hk
*Corresponding author

Leon C.U. Lei

The University of Hong Kong,
Hong Kong
Email: culei@hku.hk

Kening Zhu

School of Creative Media,
City University of Hong Kong,
Hong Kong
Email: keninzhu@cityu.edu.hk

Henry C.B. Chan

Department of Computing,
The Hong Kong Polytechnic University,
Hong Kong
Email: cshchan@comp.polyu.edu.hk

Gaowei Chen

The University of Hong Kong,
Hong Kong
Email: gwchen@hku.hk

Biographical notes: Gary K.W. Wong is an Assistant Professor in the Division of Information and Technology Studies, Faculty of Education at the University of Hong Kong. He received a BSc in Computer Science and Mathematics from Brigham Young University Hawaii, an EdM in Learning design and Leadership from the University of Illinois at Urbana Champaign and a PhD in Computer Science from the City University of Hong Kong. His area of expertise is mobile computing, mobile learning, computer-mediated education and computational thinking in K-12.

Leon C.U. Lei received his BEng (first-class honours) and PhD in Electrical and Electronics Engineering from the University of Hong Kong in 2006 and 2011, respectively. He is now an eLearning Technologist in the Technology-

Enriched Learning Initiative (TELI), HKU. His current research interests include learning analytics and smart learning environment. He was awarded with the Professional Services Individual Award in HKU 2018, the Best Paper Award in IEEE TALE 2017, TALE 2013 and IAENG IMECS 2012, Best Student Paper Award in IAENG IMECS 2010 and IAENG IMECS 2007. He is an IEEE Senior Member.

Kening Zhu is an Assistant Professor jointly appointed by the School of Creative Media and the Department of Computer Science, City University of Hong Kong. He received his PhD degree from the National University of Singapore in 2013, and his bachelor degree on Computer Science from Huazhong University of Science and Technology, China, in 2014. His research interests cover various topics on human-computer interaction (HCI), including interaction design, tangible user interfaces, mobile interfaces, VR/AR, child-computer interaction, and rapid prototyping. He has published his research in various conferences and journals, including *SIGGRAPH*, *SIGCHI*, *Interacting with Computers*, *International Journal of Human-Computer Interaction*, etc. He received the first prize of Nokia Ubimedia MindTrek Awards in 2011.

Henry C.B. Chan received his BA and MA degrees from the University of Cambridge, UK, and his PhD degree from the University of British Columbia, Canada. He is currently an associate professor and associate head of the Department of Computing, The Hong Kong Polytechnic University (PolyU). He was the recipient of the 2015 IEEE Computer Society's Computer Science and Engineering Undergraduate Teaching Award. He received four President's Awards from PolyU. He was the chair of the IEEE Hong Kong Section in 2012, and the IEEE Hong Kong Section Computer Society Chapter from 2008 to 2009.

Gaowei Chen is an Assistant Professor in the Faculty of Education at the University of Hong Kong. He received a BS in information engineering from Xi'an Jiaotong University, and an MS in educational technology from Peking University. He received his PhD in Educational Psychology from the Chinese University of Hong Kong. Before joining the University of Hong Kong, he spent three years as a postdoctoral associate in the Learning Research and Development Center at the University of Pittsburgh. His research interests include learning sciences, dialogic teaching, technology-supported teacher professional development, and learning analytics.

Welcome to this Special Issue of the *International Journal of Mobile Learning and Organisation* (*IJMLO*). This issue comprises of enhanced and extended version of research papers from the IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE) 2018.

TALE is the IEEE Education Society's flagship Asia-Pacific (IEEE Region 10) conference, catering to researchers and practitioners with an interest in science, technology, engineering and mathematics (STEM) education – with a particular emphasis on electrical and electronic engineering, telecommunications, computer engineering, computer science and allied disciplines – as well as those interested in the innovative use of digital technologies for learning, teaching and assessment in any discipline. The target audience of the conference is diverse and includes those working in the higher education, vocational education and training (VET), K-12, corporate, government, and healthcare sectors.

The theme of this Special Issue is "Innovative Engineering Education for Smarter World". This *IJMLO* issue presents four high-quality academic papers. This mix provides a well-rounded snapshot of current research in the field and provides a springboard for driving future work and discussion. The four thematic papers presented in this volume are summarised as follows:

Computational Thinking: Jiang and Wong compared primary school students' intrinsic motivation to plugged and unplugged approach to develop computational thinking using a revised Intrinsic Motivation Inventory.

Programming Education: Lam, Ke, Im, Gomes, Mendes and Marcelino studied the correlations between novice students' performance in an introductory programming course and their learning characteristics and styles as well as their motivations toward this area.

IoT Curriculum: Lei, Yau, Lui, Tam, Yuen and Lam evaluated the flipped classroom effectiveness of an Internet of things (IoT) curriculum through analysing students' video viewing behaviour and their project deliverables.

Instructional Design: Luo, Kushnazarov and Hew evaluated three different technological courses that adopted the flipped classroom approach based on the Seven Principles for Good Practice in Undergraduate Education proposed by Chickering and Gamson.

We are beholden to all of the authors and reviewers for their contributions to this Special Issue. More importantly, we express our deepest appreciation to the Editor-in-Chief of *IJMLO*, Prof. Gwo-Jen Hwang, and his associates for their support to the editorial works in this Special Issue. We hope that you as the researchers will find these papers compelling and impactful to your future work.