

**International Conference on Blended Learning 2020**

*and*

**International Symposium on Educational Technology 2020**

**CONFERENCE PROGRAMME**

**(ONLINE)**

24 to 27 August 2020

KASETSART UNIVERSITY

BANGKOK · THAILAND

## INTERNATIONAL CONFERENCE ON BLENDED LEARNING 2020

### ABOUT THE CONFERENCE

The International Conference on Blended Learning (ICBL) is an annual international conference with the main focus on blended learning – an integration of the traditional learning with innovative means, such as e-learning and open online learning, in order to create a new learning environment to improve learning effectiveness and enrich learning experience. The purpose of ICBL is to bring together researchers and developers from education and computer science to advance the research of blended learning.

This year, ICBL 2020 is the 13<sup>th</sup> conference of the ICBL conference series. ICBL 2020 is hosted by Kasetsart University, Bangkok, Thailand, but in online mode due to the Covid-19 pandemic. The main theme is *Blended Learning : Education in a Smart Learning Environment*. Accepted papers are included in the conference proceedings published by Springer under its Lecture Notes in Computer Science series (LNCS), as volume 12218. Selected good papers will be recommended to relevant special issues in the International Journal on Educational Technology in Higher Education, Australasian Journal of Educational Technology, the International Journal of Innovation and Learning, and the SN Computer Science.

Commencing in 2008, ICBL with its predecessors the International Conference on Hybrid Learning (ICHL) had attracted hundreds of delegates from many countries and regions. Previous conferences are highlighted below.

<u>Conference</u>	<u>Venue</u>	<u>Date</u>	<u>Publication</u>
1 <sup>st</sup> ICHL 2008	City University of Hong Kong	13 – 15 August 2008	LNCS vol. 5169
2 <sup>nd</sup> ICHL 2009	University of Macau	25 – 27 August 2009	LNCS vol. 5685
3 <sup>rd</sup> ICHL 2010	Beijing Normal University	16 – 18 August 2010	LNCS vol. 6248
4 <sup>th</sup> ICHL 2011	SPACE, University of Hong Kong	10 – 12 August 2011	LNCS vol. 6837
5 <sup>th</sup> ICHL 2012	South China Normal University	13 – 15 August 2012	LNCS vol. 7411
6 <sup>th</sup> ICHL 2013	University of Toronto	12 – 14 August 2013	LNCS vol. 8038
7 <sup>th</sup> ICHL 2014	East China Normal University	8 – 10 August 2014	LNCS vol. 8595
8 <sup>th</sup> ICHL 2015	Central China Normal University	27 – 29 July 2015	LNCS vol. 9167
9 <sup>th</sup> ICBL 2016	Peking University	19 – 21 July 2016	LNCS Vol. 9757
10 <sup>th</sup> ICBL 2017	City University of Hong Kong	27 – 29 June 2017	LNCS Vol. 10309
11 <sup>th</sup> ICBL 2018	Kansai University	31 July – 2 August 2018	LNCS Vol. 10949
12 <sup>th</sup> ICBL 2019	University of Hradec Kralove	2 – 4 July 2019	LNCS Vol. 11546

## INTERNATIONAL SYMPOSIUM ON EDUCATIONAL TECHNOLOGY 2020

### ABOUT THE SYMPOSIUM

The International Symposium on Educational Technology (ISET) is an annual international symposium with the main focus on a wider scope of educational technology. The purpose of ISET is to bring together researchers and developers from education and computer science to advance the research and application of information and communication technology in education.

Held together with ICBL 2020, ISET 2020 is the 6<sup>th</sup> symposium of the ISET symposium series. ISET 2020 is hosted by Kasetsart University, Bangkok, Thailand, but in online mode due to the Covid-19 pandemic. The main theme is *Technological Innovation for Smart Learning Environment*. Accepted papers are included in the symposium proceedings published by IEEE Computer Society Conference Publishing Services (CPS). Selected good papers will be recommended to relevant special issues in the International Journal on Educational Technology in Higher Education, Australasian Journal of Educational Technology, the International Journal of Innovation and Learning, and the SN Computer Science.

The Symposium series started in 2015, and since then, had attracted hundreds of delegates from many countries and regions. Previous symposiums are highlighted below.

<u>Conference</u>	<u>Venue</u>	<u>Date</u>	<u>Publication</u>
1 <sup>st</sup> ISET 2015	Central China Normal University	27 - 29 July 2015	IEEE CS CPS
2 <sup>nd</sup> ISET 2016	Peking University	19 - 21 July 2016	IEEE CS CPS
3 <sup>rd</sup> ISET 2017	City University of Hong Kong	27 - 29 June 2017	IEEE CS CPS
4 <sup>th</sup> ISET 2018	Kansai University	31 July - 2 August 2018	IEEE CS CPS
5 <sup>th</sup> ISET 2019	University of Hradec Kralove	2 - 4 July 2019	IEEE CS CPS

## CONFERENCE ARRANGEMENT

ICBL 2020 and ISET 2020 are held in online mode. Please follow the steps below to join the conference.

### **Step 1. Visit the online programme schedule**

#### ***For ICBL 2020 :***

- Visit the conference website at <http://www.aimtech.cityu.edu.hk/icbl2020>
- Click “Programme” at the menu bar
- Click the “Join” button of the corresponding session

#### ***For ISET 2020 :***

- Visit the conference website at <http://www.aimtech.cityu.edu.hk/iset2020>
- Click “Programme” at the menu bar
- Click the “Join” button of the corresponding session

### **Step 2. Join your selected conference session**

- Enter the meeting ID and/or password to join (The meeting ID and/or password will be given to you via e-mail beforehand.)
- Select “Join with Computer Audio” to enable the computer’s speaker and microphone in the Zoom meeting

### **Step 3. Leave your selected conference session**

- Select “Leave” to leave your selected conference session

### **Important Note**

All sessions are scheduled in Bangkok time, i.e. GMT + 7 hours. You are advised to join in a session earlier than the scheduled commencement time. Normally, a session will open for joining around 10 minutes before the scheduled commencement time.

## INTERNATIONAL CONFERENCE ON BLENDED LEARNING 2020

**24 August 2020** (please note that all sessions are scheduled in Bangkok time, GMT + 7 hours)

15:00 – 16:00	<p style="text-align: center;"><u>Workshop Session</u> <b>Soft Skill Development at Industrial Engineering, Kasetsart University</b> <i>Juta Pichitlamken</i> <i>Kasetsart University, Bangkok, Thailand</i> <a href="#">[click here to join]</a></p>
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**25 August 2020** (please note that all sessions are scheduled in Bangkok time, GMT + 7 hours)

09:15 – 09:30	<p style="text-align: center;">Opening Remarks <a href="#">[click here to join]</a></p>	
09:30 – 10:30	<p style="text-align: center;"><u>Keynote Session 1</u> <b>Learning Analytics based on Multilayer Behavior Fusion</b> <i>Jiannong Cao</i> <i>Hong Kong Polytechnic University, Hong Kong, China</i> <a href="#">[click here to join]</a></p>	
10:30 – 11:00	<p style="text-align: center;">Tea Break</p>	
11:00 – 12:00	<p style="text-align: center;"><u>Keynote Session 2</u> <b>User-Experience Analysis as a Design Tool for Learning and Education</b> <i>Punpiti Piamsa-nga</i> <i>Kasetsart University, Bangkok, Thailand</i> <a href="#">[click here to join]</a></p>	
12:00 – 13:30	<p style="text-align: center;">Lunch Break</p>	
13:30 – 15:30	<p style="text-align: center;"><u>Paper Session</u> <b>Adaptive Learning</b> <i>Chair : Kam Cheong Li</i> <a href="#">[click here to join]</a></p>	<p style="text-align: center;"><u>Paper Session</u> <b>Content and Instructional Design</b> <i>Chair : Simon K.S. Cheung</i> <a href="#">[click here to join]</a></p>
15:30 – 16:00	<p style="text-align: center;">Tea Break</p>	
16:00 – 17:30	<p style="text-align: center;"><u>Paper Session</u> <b>Experience in Blended Learning</b> <i>Chair : Yan Keung Hui</i> <a href="#">[click here to join]</a></p>	<p style="text-align: center;"><u>Paper Session</u> <b>Institutional Policies and Strategies</b> <i>Chair : Heng Luo</i> <a href="#">[click here to join]</a></p>

**INTERNATIONAL CONFERENCE ON BLENDED LEARNING 2020**

**26 August 2020**

*(please note that all sessions are scheduled in Bangkok time, GMT + 7 hours)*

09:30 - 10:30	<p><u>Keynote Session 3</u></p> <p><b>A Multimodal Human-Computer Interaction System and its Application in Smart Learning Environments</b></p> <p><i>Jiyou Jia</i> <i>Peking University, Beijing, China</i></p> <p><a href="#">[click here to join]</a></p>
10:30 - 11:00	<p>Tea Break</p>
11:00 - 12:00	<p><u>Keynote Session 4</u></p> <p><b>Digital Transformation and Digital Literacy : Blended Learning in Action</b></p> <p><i>Hugh O'Connell</i> <i>ICDL Thailand, Bangkok, Thailand</i></p> <p><a href="#">[click here to join]</a></p>
12:00 - 13:30	<p>Lunch Break</p>
13:30 - 15:30	<p><u>Paper Session</u></p> <p><b>Enriched &amp; Smart Learning Experience</b></p> <p><i>Chair : Yan Keung Hui</i></p> <p><a href="#">[click here to join]</a></p>
15:30 - 16:00	<p>Tea Break</p>
16:00 - 17:30	<p><u>Paper Session</u></p> <p><b>Smart Learning Environment</b></p> <p><i>Chair : Fu Lee Wang</i></p> <p><a href="#">[click here to join]</a></p>

**INTERNATIONAL CONFERENCE ON BLENDED LEARNING 2020**

**27 August 2020**

*(please note that all sessions are scheduled in Bangkok time, GMT + 7 hours)*

09:30 – 10:30	<p style="text-align: center;"><u>Keynote Session 5</u> <b>The Skill of Future Workforce in the Era of Business Disruptions</b> <i>Karlcharn Kongkatong</i> <i>Solution One, Bangkok, Thailand</i> <a href="#">[click here to join]</a></p>
10:30 – 11:00	Tea Break
11:00 – 12:15	<p style="text-align: center;"><u>Panel Session</u> <b>Smart Learning : Pedagogical and Technological Perspectives</b> <i>Horace H.S. Ip (chair)</i> <i>City University of Hong Kong, Hong Kong, China</i> <i>Shinichi Sato (co-chair)</i> <i>Nihon Fukushi University, Tokai, Japan</i> <a href="#">[click here to join]</a></p>
12:15 – 12:30	<p style="text-align: center;">Closing Remarks and Award Presentation <a href="#">[click here to join]</a></p>

## INTERNATIONAL SYMPOSIUM ON EDUCATIONAL TECHNOLOGY 2020

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09:15 – 09:30	<p>Opening Remarks</p> <p>[<a href="#">click here to join</a>]</p>	
09:30 – 10:30	<p><u>Keynote Session 1</u></p> <p><b>Learning Analytics based on Multilayer Behavior Fusion</b></p> <p><i>Jiannong Cao</i></p> <p><i>Hong Kong Polytechnic University, Hong Kong, China</i></p> <p>[<a href="#">click here to join</a>]</p>	
10:30 – 11:00	<p>Tea Break</p>	
11:00 – 12:00	<p><u>Keynote Session 2</u></p> <p><b>User-Experience Analysis as a Design Tool for Learning and Education</b></p> <p><i>Punpiti Piamsa-nga</i></p> <p><i>Kasetsart University, Bangkok, Thailand</i></p> <p>[<a href="#">click here to join</a>]</p>	
12:00 – 13:30	<p>Lunch Break</p>	
13:30 – 15:30	<p><u>Paper Session</u></p> <p><b>Smart Learning Environment</b></p> <p><i>Chair : Yinghui Shi</i></p> <p>[<a href="#">click here to join</a>]</p>	<p><u>Paper Session</u></p> <p><b>AR &amp; VR for Teaching and Learning</b></p> <p><i>Chair : Lap-Kei Lee</i></p> <p>[<a href="#">click here to join</a>]</p>
15:30 – 16:00	<p>Tea Break</p>	
16:00 – 18:00	<p><u>Paper Session</u></p> <p><b>Instructional Technology</b></p> <p><i>Chair : Lap-Kei Lee</i></p> <p>[<a href="#">click here to join</a>]</p>	<p><u>Paper Session</u></p> <p><b>Game-based and Flexible Learning</b></p> <p><i>Chair : Yoko Hirata</i></p> <p>[<a href="#">click here to join</a>]</p>



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09:30 – 10:30	<p align="center"><u>Keynote Session 3</u></p> <p align="center"><b>A Multimodal Human-Computer Interaction System and its Application in Smart Learning Environments</b></p> <p align="center"><i>Jiyou Jia</i> <i>Peking University, Beijing, China</i></p> <p align="center"><a href="#">[click here to join]</a></p>		
10:30 – 11:00	<p align="center">Tea Break</p>		
11:00 – 12:00	<p align="center"><u>Keynote Session 4</u></p> <p align="center"><b>Digital Transformation and Digital Literacy : Blended Learning in Action</b></p> <p align="center"><i>Hugh O'Connell</i> <i>ICDL Thailand, Bangkok, Thailand</i></p> <p align="center"><a href="#">[click here to join]</a></p>		
12:00 – 13:30	<p align="center">Lunch Break</p>		
13:30 – 15:30	<p align="center"><u>Paper Session</u></p> <p align="center"><b>E-learning and Online Learning (I)</b></p> <p align="center"><i>Chair : Ivana Simonova</i></p> <p align="center"><a href="#">[click here to join]</a></p>	<p align="center"><u>Paper Session</u></p> <p align="center"><b>Institutional Policies and Strategies (I)</b></p> <p align="center"><i>Chair : Kwan-Keung Ng</i></p> <p align="center"><a href="#">[click here to join]</a></p>	<p align="center"><u>Paper Session</u></p> <p align="center"><b>Learning Analytics and Education Big Data</b></p> <p align="center"><i>Chair : Yunxiang Zheng</i></p> <p align="center"><a href="#">[click here to join]</a></p>
15:30 – 16:00	<p align="center">Tea Break</p>		
16:00 – 17:30	<p align="center"><u>Paper Session</u></p> <p align="center"><b>E-learning and Online Learning (II)</b></p> <p align="center"><i>Chair : Oliver Tat Sheung Au</i></p> <p align="center"><a href="#">[click here to join]</a></p>	<p align="center"><u>Paper Session</u></p> <p align="center"><b>Institutional Policies and Strategies (II)</b></p> <p align="center"><i>Chair : Naraphorn Paoprasert</i></p> <p align="center"><a href="#">[click here to join]</a></p>	<p align="center"><u>Paper Session</u></p> <p align="center"><b>Online Platform and Environment</b></p> <p align="center"><i>Chair : Ivan Ka-Wai Lai</i></p> <p align="center"><a href="#">[click here to join]</a></p>

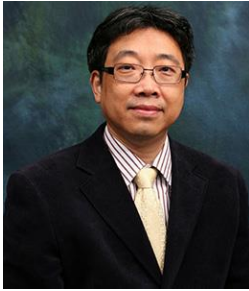
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12:15 – 12:30	<p style="text-align: center;">Closing Remarks and Award Presentation <a href="#">[click here to join]</a></p>

## KEYNOTE SESSION 1



### **Learning Analytics based on Multilayer Behavior Fusion**

Jiannong Cao

Hong Kong Polytechnic University  
Hong Kong, China

**Abstract.** Learning analytics is the measurement, collection, and analysis of data about learners and their contexts for the purposes of understanding and optimizing the process of learning and the underlying environment. Due to the complex nature of the learning process, existing works mostly focus on the modeling and analysis of single learning behavior and thus bears limited capacity in achieving good performance and interpretability of predictive tasks. We propose a research framework for learning analytics based on multilayer behavior fusion which achieves significantly better performance in various tasks including at-risk student prediction. Results of extensive evaluation on thousands of students demonstrate the effectiveness of multilayer behavior fusion. We will report the insights about mining learning behaviors at different layers including physical, social and mental layers from the data collected from multiple sources. We will also describe the quantitative relationships between these behaviors and the students' learning performance.

**Biography.** Dr. Cao is currently a Chair Professor of Department of Computing at The Hong Kong Polytechnic University, Hong Kong. He is also the director of the Internet and Mobile Computing Lab in the department and the director of University's Research Facility in Big Data Analytics. He served the department head from 2011 to 2017. Dr. Cao's research interests include parallel and distributed computing, big data analytics, wireless sensing and networking, and mobile and edge computing. He has published extensively on these topics, with co-authored books and papers in major international journals and conference proceedings. He received Best Paper Awards from *IEEE Trans. On Industrial Informatics*, *DSAA'2017*, *IEEE SMARTCOMP 2016*, *IEEE/IFIP EUC 2016*, *IEEE ISPA 2013*, *IEEE WCNC 2011*, etc.

Dr. Cao is a fellow of IEEE and ACM distinguished member. In 2017, he received the Overseas Outstanding Contribution Award from China Computer Federation. Dr. Cao served the Chair of the Technical Committee on Distributed Computing of IEEE Computer Society 2012-2014, a member of IEEE Fellows Evaluation Committee, IEEE Computer Society Education Awards Selection Committee, IEEE Communications Society Awards Committee, and Steering Committee of IEEE Transactions on Mobile Computing. Dr. Cao has served as chairs of organizing and technical committees of many international conferences including IEEE INFOCOM, IEEE PERCOM and IEEE COMPSAC. He also served as associate editor of many international journals including IEEE TC, IEEE TPDS, IEEE TBD, IEEE TCC, IEEE IoT Journal, ACM TOSN, ACM TCPS, and ACM TIST.

## KEYNOTE SESSION 2



### **User-Experience Analysis as a Design Tool for Learning and Education**

Punpiti Piamsa-nga  
Kasetsart University  
Bangkok, Thailand

**Abstract.** Traditionally curriculum mainly composed of topics that the teachers believe they should be taught, some of which may not be necessary. Students may also be interested in other topics. Nevertheless, this is still the best method to teach when resources and environment do not permit to do others. Nowadays, in the Internet era, content is conveniently accessible, providing new learning methods and environments for students to explore things beyond teacher-designed curriculum. However, there should be a balance between what students learn and what is expected of them. Ideally, students should be able to personalize their learning with an insightful guidance from teachers. Education in the 21st century should emphasize more on learning skills, and focus less on teaching. To have more effective and efficient system, optimal improvement can be achieved by balancing expectations and benefits among all uses.

In this talk, we discussed the system by analysing the perspectives and visions of all users to the system. The key success factor is to understand users' needs and make them the core participation to the system. User experience (UX) analysis can be used as a design tool. It will help the users to adopt to the system more comfortably. Apart from education, it is also applicable to other applications which involved many users in different roles, such as smart farming, welfare management, customer relationship management. Two case studies which use UX analysis as a design tool are presented: designing Computing Science curriculum for K-12 level and data collection system for dairy farms.

**Biography.** Dr. Punpiti Piamsa-nga is currently an associate professor and Head of Department of Computer Engineering, Kasetsart University (KU), Thailand. He is also a deputy director for research information of KU Research and Development Institute. He earned his B.Eng. and M.Eng. in Electrical Engineering from KU in 1985 and 1989, respectively, and his D.Sc. in Computer Engineering from the George Washington University in 1999. He has been a member of various committees for developing computer science curriculums for both K12 and higher education. He has been Team Leader of Thailand for participating in International Olympiad in Informatics for 10 years. His current main research interest is on feature extraction and pattern analysis in various applications, such as smart farming, bioinformatics, and image/video content analysis.

### KEYNOTE SESSION 3



#### **A Multimodal Human-Computer Interaction System and its Application in Smart Learning Environments**

Jiyou Jia  
Peking University  
Beijing, China

**Abstract.** A multimodal human-computer interaction system is composed of the comprehensive usage of various input and output channels. For the information input, the traditional keyboard typing, mouse clicking, screen touching, as well as the latest speech and face recognition can be used. For the output, the traditional screen display, the latest speech and facial expression synthesis and gesture generation can be used. This speech will at first present such a system developed by the speaker's team, CSIEC (Computer Simulating Interactive Educational Communication). Then the speech will introduce its pilot applications in two intelligent tutoring systems, one for mathematical instruction and another for English learning as a foreign language.

**Biography.** Prof. Jiyou Jia is a full professor and the Head of the Department of Educational Technology, Graduate School of Education, Peking University, China and is also the founding director of International Research Center for Education and Information at Peking University. From August 2017 to December 2018, Prof. Jia served as Distinguished Professor at Institute for Research in Open and Innovative Education, the Open University of Hong Kong. He was invited to work as a guest professor in 2015 by School of Education, Technical University of Munich, Germany.

Prof. Jia received B.S. and Master of Education from Peking University, and Ph.D. in artificial intelligence from Augsburg University, Germany. His research interests include educational technology and artificial intelligence in education, especially in TELL (Technology Enhanced Language Learning), math education with ICT, and decision making support system. He has been responsible for a dozen of national projects and international cooperation projects. His research has won a number of national and international prizes including the First Class Award of the Fifth National Award for Outstanding Achievements in Educational Research, from Ministry of Education, China, 2016, and IAAI (Innovative Application of Artificial Intelligence) Deployed Application Award by AAAI (Association of Advancement of Artificial Intelligence), USA, 2008.

Prof. Jia has published more than 100 articles in internationally or nationally peer-reviewed journals and conferences including Computers and Education, Knowledge-Based Systems, etc. He has edited one book and authored another one, both written in English and published by IGI Global, USA. He is also the author of one Chinese book and one book in German. He serves as a reviewer for several international journals indexed in SCI/SSCI, a co-chair or PC member of more than 20 international conferences including ICCE, ICALT and GCCCE, and an advisory expert for some scientific and governmental organizations.

## KEYNOTE SESSION 4



### **Digital Transformation and Digital Literacy : Blended Learning in Action**

Hugh O'Connell  
ICDL Thailand  
Bangkok, Thailand

**Abstract.** The talk will consider the driving forces for digital transformation that are creating change at an ever increasing pace. This creates a gap between the skills that workers have and the skills that they need. There requires an imperative for business and education to fill the gap. It is clear that a divide is found between the digital skills that people have and the skills that they think they have, called the “perception gap.” In other words, people think they are better at basic IT skills than they really are. In order to close this gap, educationalists must consider how to provide base level digital skills to the population as a whole. Traditional educational approaches do not have the capacity to achieve this, so the solution to this dilemma is often touted to be e-learning. This however leads to a paradox – can computers be used to learning computing? This talk proposes that blended learning is the necessary choice to ensure maximum inclusion and effective skills development.

**Biography.** Dr. Hugh O'Connell is managing director of ICDL Thailand - The International Computer Driving License, the world's leading computer skills certification. He has been resident in Thailand for almost 25 years and has a background in education and training. Hugh is working closely with the Thai Government to promote digital literacy in Thailand and align digital skills with the Thailand 4.0 initiative. As a result, in late 2016, ICDL programmes were the first digital literacy qualifications to be mapped to the Thai Qualifications framework, and are now being implemented throughout both the public and private sector. Prior to working with ICDL, Hugh has run his own business and taught at a number of universities at both the undergraduate and postgraduate level. He is a vice president of the Irish Thai Chamber of Commerce and actively works to promote mutually beneficial links between Ireland and Thailand.

## KEYNOTE SESSION 5



### **The Skill of Future Workforce in the Era of Business Disruptions**

Karlcharn Kongkatong

Solution One  
Bangkok, Thailand

**Abstract.** To become a successful company or to maintain its success, there requires the specific set of skills of the workforce. It is important to recognize that these skills are becoming increasingly more dynamics today, especially when facing with the transformation into the digital and shared society today. Higher cognitive skills which involve creativity and innovation have to be part of skill development and training at higher education institutes. In addition, social and emotional skills are needed when dealing with workplace synergy and customers. Digital skills are absolutely the necessity for any firm regardless of the size due to digitalization of business operations. My story includes business circumstances and trends during the last decade in which Solution One Holding has to overcome digital and business disruptions, regulatory challenges, and dramatic changes in consumer behavior. The discussion will conclude with the key skill areas that business operators will likely need in the next decade. Although many business operators have clearly identified these future skills, it appears that the contents for skill development are not totally effective. It is hopeful that the CEO's insights will lead to better content development which can be successfully disseminated through the combination of e- and blended Learning as a lack of sufficient skillful workforce has contributed to business interruptions and discontinuation.

**Biography.** Mr. Kongkatong is currently the CEO of one of Thailand's largest m-Commerce firms and a successful consultant in the telecommunication businesses. He started Solution One Holding in 2002 as the country's first mobile-application company. Solution One became the first Thai company to aggregate musical works from international music label later in 2002 and joined Apple music and iTunes as a direct music partner in 2012. Solution One Holding partnered with Youtube as a direct partner in 2012 and later moved to become its Multi-Channel Network in 2016. Mr. Kongkatong pioneered in the entertainment industry in Thailand by becoming the first service provider which has distributed Korean and Myanmar musical work since 2005. Before Solution One Holding, Mr. Kongkatong established S-One Telecom in 2000 to work with Nokia (Thailand) which resulted in the development of Club Nokia and CRM Platform for Nokia (Thailand). S-One Telecom wrote EZ Thai Application, the first Thai Based Application for Symbian, bundled and sold with over 2.5 million phones from 2002-2007. The company has operated as the first private SMS Gateway linked with all local operators from 2002-present (now as part of Solution One Holding).

Mr. Kongkatong went to the US to start his Middle Year program. After the completion at Westtown School in Pennsylvania, he continued his undergraduate education at University of Washington in Economics during 1986-1990. He completed his MBA program in Finance from Pepperdine University in California in 1991. Then, he returned to Thailand and had worked with Samart Corporation from 1992 until the start of S-One Telecom in 2000.

## PANEL SESSION

### Smart Learning : Pedagogical and Technological Perspectives



**Horace H.S. Ip (Chair)**

*City University of Hong Kong, HKSAR, China*

Prof. Ip is the Vice-president in Student Affairs and a Chair Professor of Computer Science at City University of Hong Kong. He has a BSc in Applied Physics and PhD in Image Processing from University College, London, United Kingdom. His research interests include multimedia content analysis and retrieval, and virtual reality for education. Professor Ip's research has won many awards including Prix Ars Electronica, and a Gold Medal of the Geneva Salon International Des Inventions. He has published over 300 papers in international journals and conference proceedings. Prof. Ip is a Fellow of the Hong Kong Institution of Engineers (HKIE), a Fellow of the UK Institution of Engineering and Technology (IET), a Fellow of the British Computer Society (BCS) and a Fellow of the International Association for Pattern Recognition (IAPR).



**Shinichi Sato (Co-chair)**

*Nihon Fukushi University, Tokai, Japan*

Prof. Sato is a Professor at Nihon Fukushi University. He received his PhD in Engineering from the University of Tokyo in 2008. He served as a Chief of E-Learning Department in Nihon Fukushi University and Managing Editor of the International Journal for Educational Media and Technology. His research interests include educational technology, virtual reality, and human computer interface. Especially, he is interested in the use of information and communication technology in experiential learning. He received several awards including Outstanding Paper Award in ED-MEDIA 2010 from the Association for the Advancement of Computing in Education.



## INTERNATIONAL CONFERENCE ON BLENDED LEARNING 2020

### PAPER SESSIONS

#### **ICBL 2020 : Adaptive Learning**

*Chair : Kam Cheong Li*

Personalising Learning with Learning Analytics: A Review of Literature

*Kam Cheong Li and Billy Tak-Ming Wong*

Online Gamified Learning Platforms (OGLPs) for Participatory Learning

*Kenneth Shiu-Pong Ng, Ioan Ka-Wai Lai and Kwan-Keung Ng*

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