

Conference Program

C1: AIED/ITS/AL C2: CSCL/LS C3: ALT/LA/DI C4: CUMTEL

C5: EGG C6: TELL C7: PTP

BOPN Best Overall Paper Award Nominee BSPN Best Student Paper Award Nominee

BTDPN Best Technical Design Paper Award Nominee

F Full Paper (25 mins presentation + 5 mins Q&A)

S Short Paper (15 mins presentation + 5 mins Q&A)

ES Extended Summary (10 mins presentation + 5 mins Q&A)

26 Nove	mber 2018 (Monday)	
09:00- 10:30	 Workshop W10: The Seventh International Workshop on ICT Trends in Emerging Economies (WICTTEE 2018) Chair: Niwat SRISAWASDI, Khon Kaen University, Thailand #W10-01F: A Blended Collaborative Knowledge Construction to Preparing Senior High-School Students for Science Project Development: Learn-Read-Share Academic Journal Publications in Seminar Course Chitphon YACHULAWETKUNAKOR, Charoenchai WONGWATKIT, Jintana WONGTA, Ratthakarn Na PHATTHALUNG, & Sumalee KATSUWAN #W10-08F: A Development of 3D Augmented Reality Mobile Application to Facilitating Ecotourism-based Herbal Learning in MFU Botanical Garden Ratchanon NOBNOP, Charoenchai WONGWATKTIT, Jintana WONGTA, & Karn SOPONRONNARIT #W10-09F: A Simulation Game to Diagnosing Major Depressive Disorder based on PHQ-9 for Psychiatrist Program in Thailand: An Evaluation of Game Interface Design and Prototype	Room LM
	Tutorial 1 : Exploring Computer-Based Learning Behaviour Using Lag Sequential Analysis Technique Tutor: Nurbiha A SHUKOR, Universiti Teknologi Malaysia, Malaysia	Room B









26 Novembe	r 2018 (Monday)	
	kshop W08: The 6th Workshop on Technology-Enhanced STEM Education (TeSTEM) ir: Ying-Tien WU, National Central University, Taiwan	Room C
-	08-10F: A Proposal for Personalized Inquiry-based Flipped Learning with Mobile Technology Pawat CHAIPIDECH & Niwat SRISAWASDI	
lı C	08-02F: The impact of inquiry-based instruction with inquiry map on conceptions of earning science and approaches to learning science Chia-Jung CHANG, Cai-Ting WEN, Li-Wen TSENG, Ming-Hua CHANG, Chen-Chung LIU, Shih-Hsun FAN CHIANG, & Fu-Kwun HWANG	
#W0	08-03S: The effectiveness of integrating adaptive learning platform with flipped classroom in students' learning performance and self-learning approach Chia-Ching LIN & Ying-Tien WU	
L	08-07S: Developing and Assessing a Tool for the Evaluation of College Students' Digital Literacy: A Case Study of Khon Kean University Anucha SOMABUT & Grichawat LOWATCHARIN	
S Chai	kshop W09: 5th ICCE Workshop on Learning Analytics (LA) & Joint Activity on predicting student performance ir: Brendan FLANAGAN, Kyoto University, Japan 19-04S: Towards an Open Architecture for Learning Analytics in Open and Distance	Room D
- E	Education Tore HOEL & Jun XIAO	
#W0	19-05S: Dynamic Adjustment of Teaching Strategy: Dynamic Analysis Using Brain Waves Han-Chieh CHAO, Ting-Mei LI, Wei-Xiang SHEN, & Hsin-Hung CHO 19-08S: How is teachers' feedback-seeking frequency related to their performance scores while using learning analytics-enhanced e-portfolio?	
#W0	Pihel HUNT, Katrin SAKS, Bert SLOF, Ali LEIJEN, & Marieke VAN DER SCHAAF 19-16S: Beyond Learning Analytics: Framework for Technology-Enhanced Evidence- Based Education and Learning Hiroaki OGATA, Rwitajit MAJUMDAR, Gökhan AKÇAPINAR, Mohammad Nehal HASNINE, & Brendan FLANAGAN	
- Chai	kshop W01: The second International Workshop on Information and Communication Technology for Disaster and Safety Education (ICTDSE2018) irs: Hiroyuki MITSUHARA, Tokushima University, Japan & Norio SETOZAKI, Nagasaki	Room E
#W0	University, Japan 01-02F: Evacuation Drill Using Augmented Reality and a Handheld Head-Mounted Display Hiroyuki MITSUHARA, Hiroki IRIE, & Masami SHISHIBORI	
#W0	01-03F: HyDi: Hydrometeorological Disaster Preparedness Simulator Alyzza May DELGADO, Rodel Patrick NAUI, Lara Angelica SEVERINO, & Liandro Antonio TABOR	
f Y	01-01S: Review of Hazard Information Collected for Local Disaster Prevention by Residents in a Historical Local Town Yasuhisa OKAZAKI, Sho MATSUO, Hiroshi WAKUYA, Nobuo MISHIMA, Yukuo HAYASHIDA, & Byung-Won MIN	









	 Workshop W03: The Applications of Information and Communication Technologies in Adult and Continuing Education Chair: Chunping ZHENG, Beijing University of Posts and Telecommunications, China #W03-01F: Exploring Online Self-regulated Learning from a Sociocultural Perspective: The Case of Eight High-achieving EFL Learners Mengya GAO & Chunping ZHENG #W03-02F: A Systematic Literature Review of Virtual Reality in Adult Foreign Language Education Lili WANG & Chunping ZHENG #W03-03S: Exploring Blended Teaching Mode Based on the Blackboard Platform Qiao LUAN, Wei JIA, & Chunping ZHENG 	Room F
10:30- 11:00	Coffee/Tea Break	Rooms/ Lobby
11:00- 12:30	Workshop W10: The Seventh International Workshop on ICT Trends in Emerging Economies (WICTTEE 2018) Chair: Niwat SRISAWASDI, Khon Kaen University, Thailand #W10-10F: Digital Game-Based Learning as an Innovation to Enhance Understanding and Motivation for Mathematics and Sciences Classroom Issara KANJUG, Charuni SAMAT, Parnpitcha KANJUG, & Waranon MUNKONG #W10-11F: Digital Educational Resources Configuration Model and Mechanisms for K-12 in China Jihong DING, Huazhong LIU, Mengsha WEN, Wenzheng YANG, & Bo JIANG #W10-17F: Efficacy of Learning Scaffolds in Teaching IT Students in the Zone of Proximal Development Arlene Mae C. VALDERAMA #W10-03S: Developing and Assessing a Tool for the Evaluation of College Students' Digital Literacy: A Case Study of Khon Kean University Anucha SOMABUT & Grichawat LOWATCHARIN	Room LM
	Tutorial 1 : Exploring Computer-Based Learning Behaviour Using Lag Sequential Analysis Technique Tutor: Nurbiha A SHUKOR, Universiti Teknologi Malaysia, Malaysia	Room B
	Workshop W08: The 6th Workshop on Technology-Enhanced STEM Education (TeSTEM) Chair: Chia-Ching LIN, National Kaohsiung Normal University, Taiwan #W08-04F: A Personalized Mobile Learning System for Solving STEM Teachers' TPACK Problems Tanachai KAJONMANEE, Niwat SRISAWASDI, & Kornchawal CHAIPAH #W08-05F: Collaborative and Interactive Online Simulation System for Secondary School Scientific Experiments Supasin RATTANANAKIN, Niwat SRISAWASDI, & Kornchawal CHAIPAH #W08-08S: Designing A Mobile Game-based Learning Environment to Enhance Students' Mental Model of Mathematical Ratio Concept Supawadee JANTANOOT & Issara KANJUG #W08-09S: Using Chatbots to Teach STEM Related Research Concepts to High School Students Jennifer URETA & Joanna Pauline RIVERA	Room C









student po Chair: Stian H. #W09-15S: Jo Brendan F #W09-03S: To Methods Mohamma Kousuke M #W09-09F: Pr Reader Be Alexander #W09-07S: So Hiroaki OO	OP: 5th ICCE Workshop on Learning Analytics (LA) & Joint Activity on predicting erformance AKLEV, EPFL, Switzerland Interpretain Activity on Learner Performance Prediction using the BookRoll Dataset of AKLEV, EPFL, Switzerland Interpretain Activity on Learner Performance Prediction using the BookRoll Dataset of AKLEV, EPFL, Switzerland Interpretain Activity on Learner Performance Prediction using the BookRoll Dataset of AKCANAGAN, Weigin CHEN, & Hiroaki OGATA Interpretain ACTIVE ACT	Room D
Workshop WC Technolog Chairs: Yasuhi University, #W1-05F: Ele Awarenes Didin WAF #W1-04S: Usi for Disaste	O1: The second International Workshop on Information and Communication gy for Disaster and Safety Education (ICTDSE2018) isa OKAZAKI, Saga University, Japan & Hiroyuki MITSUHARA, Tokushima	Room E
and Conti Chair: Chunpin #W03-05S: Er Learning 9 Xiying FAI #W03-06S: A Weihong 2 #W03-07F: Ex Their App	V Literature Review of Adult Language Learning Based on Virtual Environments	Room F
2:30- .3:30 Lunch		Rooms/ Lobby









26 Nove	ember 2018 (Monday)	
13:30- 15:30	 Workshop W10: The Seventh International Workshop on ICT Trends in Emerging Economies (WICTTEE 2018) Chair: Bo JIANG, Zhejiang University of Technology, China #W10-19F: Cognitive Flexibility of Students Learning with Constructivist Learning Environment Model Enhancing Cognitive Flexibility in Higher Education Sumalee CHAIJAROEN, Kwanjai DEEJRING, & Charuni SAMAT #W10-22F: Investigating the Impact of Smartphone-based Guided-inquiry Laboratory Approach on the Development of Middle School Students' Science Learning Performance Banjong PRASONGSAP & Niwat SRISAWASDI #W10-06S: The Development of Experimental Set on Internet of Thing (IoT) Based on Constructivist Theories to Enhance Ill-Structured Problem Solving for Engineering Students Thawach THAMMABUT & Sumalee CHAIJAROEN #W10-07S: Reconsidering Digital Natives and Digital Immigrant in the Schools Emelia Fantoza SARAIH, Su Luan WONG, Soaib ASIMIRAN, Mas Nida Md. KHAMBARI, & Mohd Majid KONTING #W10-12S: Portraits of Underprivileged Filipino Second Language Learners: Towards the Development of Computer-based Educational Game Rex BRINGULA, Ma. Mercedes T. RODRIGO, Jaclyn L. OCUMPAUGH, Kaska PORAYSKA-POMSTA, Ibukun OLATUNJI, & Rose LUCKIN #W10-13S: Influence of Students' Perceived Ease of Use, Perceived Usefulness and Time Spent Towards Students' Continuance Intention Using MOOC among Public University Students Aisha Aminu DANEII, Mas Nida Md. KHAMBARI, & Ahmad Fauzi MOHD AYUB 	Room LM
	Tutorial 1: Exploring Computer-Based Learning Behaviour Using Lag Sequential Analysis Technique Tutor: Nurbiha A SHUKOR, Universiti Teknologi Malaysia, Malaysia Workshop W08: The 6th Workshop on Technology-Enhanced STEM Education (TeSTEM) Chair: Margus PEDASTE, University of Tartu, Estonia #W08-01F: Reconsidering Digital Natives' Career Choice Intention in STEM via TPB, SCCT and Media Exposure Priscilla MOSES, Phaik Kin CHEAH, & Tiny Chiu Yuen TEY #W08-11F: Fostering High School Students' Innovative Thinking and Design with STEM: Smart School Projects on IT Maker Day Charoenchai WONGWATKIT, Pakpoom PROMMOOL, & Ratchanon NOBNOP #W08-12F: Effectiveness of Experiment Design Guidelines for Virtual Laboratories in the SDVICE tool Anita DIWAKAR & Santosh NORONHA #W08-13F: Designing Digital Card Game Environment to Promote Students' Conceptual Improvement in Newton's Laws of Motion Sakkarach MUANGBANGYUNG & Niwat SRISAWASDI	Room B Room C









Zo Nove	mber 2018 (Monday)	
	 Workshop W09: 5th ICCE Workshop on Learning Analytics (LA) & Joint Activity on predicting student performance Chair: Gökhan AKÇAPINAR, Kyoto University, Japan #W09-10F: Feature analysis for predicting students' performance from reading patterns in an e-learning system	Room D
	Workshop W05: Workshop on the 3rd Computer-Supported Personalized and Collaborative Learning Chair: Chiu-Pin LIN, National Tsing Hua University, Taiwan #W05-01F: Study of Multi-Mouse Puzzle Peer Version: Answering with a Peer Juan ZHOU, Hajime KITA, Hideyuki TAKADA, & Ian PIUMARTA #W05-03F: Exploring the Impact of Prior Knowledge on Learning Effectiveness of Competitive Game-based Learning: A Case Study on English Reading Courses Ru-Shan CHEN, Jui-Chi PENG, Gwo-Haur HWANG, Beyin CHEN, & Yu-Ling LAI #W05-06S: Applying Machine Learning Concept to Provide Adaptable Digital Tour Guide System Kai-Yi CHIN, Ko-Fong LEE, Ya-Chuan KAO, & Yen-Lin CHEN #W05-08S: Utilizing Hiteach Platform to Support 5E Inquiry-based Learning for Elementary School Students ChiungLing TUNG, SuJian YANG, & ChiuPin LIN	Room E
	 Workshop W15: Innovative Designs for Mobile and Ubiquitous Learning: 1:1 and Beyond Chair: Daner SUN, The Education University of Hong Kong, Hong Kong #W15-02S: Designing a Seamless STEM Learning Environment: IN-STEM for Collaborative Problem Solving Daner SUN #W15-03F: A Rubric for Assessing Seamlessized Science Learning Lesson Plans Lung-Hsiang WONG, Chee-Kit LOOI, & Xin Pei VOON #W15-01S: Mobile Learning for Language Literacy: The Effects of Applying Virtual-Reality Implementation for Reflection after Real-Life Investigation Ting-Chia HSU & Chuan-Yi CHAN #W15-04F: Facilitating Collaborative Learning for Japanese Language Learners using Sketchpad Noriko UOSAKI & Gustavo ZURITA 	Room F
15:30- 16:00	Coffee/Tea Break	Rooms/ Lobby









16:00-	Workshop W10: The Seventh International Workshop on ICT Trends in Emerging Economies	Room LM
18:00 (WICTTEE Chair: Niwat Si #W10-15S: Us Classroom	(WICTTEE 2018)	
	Chair: Niwat SRISAWASDI, Khon Kaen University, Thailand	
	#W10-15S: Using Constructivism Learning Environment Management System to Flipped Classroom and Enhance an EFL'S English Reading Comprehension	
	Napalai TIJAI & Issara KANJUG #W10-16S: Development of Constructivist Cooperate Game Learning Environment Model to Enhance Problem Solving for Veterinary Students Pennapa KUMPANG & Suchat WATTANACHAI	
	#W10-20S: Design and Development of Constructivism Mobile-Based Learning Environment on English Subject for Junior High School students in Thailand Kunlanan SITTICHANSEN & Issara KANJUG	
	#W10-21S: Designing of Constructivist Mobile Application Learning Environments to Foster Creative Thinking on Basic Photography Skill for High School Students Thanaban KWANMAN & Charuni SAMAT	
	Community Building: "Development of Information and Communication Technology in the Asia-Pacific Neighborhood (DICTAP)" SIG Chair: Niwat SRISAWASDI, Khon Kaen University, Thailand	
	Tutorial 1 : Exploring Computer-Based Learning Behaviour Using Lag Sequential Analysis Technique Tutor: Nurbiha A SHUKOR, Universiti Teknologi Malaysia, Malaysia	Room B
	Workshop W08 : The 6th Workshop on Technology-Enhanced STEM Education (TeSTEM) Chair: Ying-Tien WU, National Central University, Taiwan	Room C
	#W08-14F: An Approach to Design Educational Digital Game to Improve Students' Conceptual Development in Physics of Static Electricity Chanvit JUNNGAM & Niwat SRISAWASDI	
	#W08-15F: Development of Gamified Flipped-class Inquiry Learning in Physics Concept of Energy for School Science: An Early Stage Tanakorn PANOMRERNGSAK & Niwat SRISAWASDI	
	Workshop W09: 5th ICCE Workshop on Learning Analytics (LA) & Joint Activity on predicting student performance	Room D
	Chair: Brendan FLANAGAN, Kyoto University, Japan #W09-14F: Benchmarking and Tuning Regression Algorithms on Predicting Students' Academic Performance	









26 November 2018 (Monday)	
Workshop W05: Workshop on the 3rd Computer-Supported Personalized and Collaboral Learning Chair: Shu-Yuan TAO, Takming University of Science and Technology, Taiwan #W05-04F: Generation of Personalized Abstract and Real-World Programming Exercise Thomas James TIAM-LEE & Kaoru SUMI #W05-07F: Investigating Effects of Game-based Design Mechanisms on Learners' Reasonability: A Cluster Analysis Shu-Yuan TAO, Tsung-Yen CHUANG, & Wei-Fan CHEN #W05-02S: Exploring Students' Learning Outcome and Gender Differences in a Digital Clip Course Yi-Wen LIAO, Xu-Jia ZHEN, & Gwo-Haur HWANG #W05-05S: Comparing the effect of cognitive style on learners' engagement levels and learning performance by analyzing LMS logs Liang-Yi LI	oning Video
 Workshop W02: New perspectives and methodologies in examining learning Chairs: Elizabeth KOH, National Institute of Education, Nanyang Technological University, Singapore & Hyo-Jeong SO, Ewha Womans University, South Korea #W02-01F: Propose a New Archaeology Application (AVI) for Educational Community Zaid MUSTAFA, Julián FLORES, & José M. COTOS #W02-02F: Measuring Academic Emotions and Facial Expressions in Online Video-base Learning Jihyang LEE, Hyunjin PARK, & Hyo-Jeong SO Community Building: "Classroom, Ubiquitous and Mobile Technologies Enhanced Learn (CUMTEL)" SIG Chair: Chengjiu YIN, Kobe University, Japan 	









27 Nove	mber 2018 (Tuesday)	
09:00- 10:30	Tutorial 2 : Application of Text Analytics to Enhance Teaching and Learning Experience Tutors: Venky SHANKARARAMAN & Swapna GOTTIPATI, Singapore Management University, Singapore	Room LM
	Doctoral Student Consortia	Room BC
	Chairs: Sahana MURTHY, Indian Institute of Technology Bombay, India Hiroaki OGATA, Kyoto University, Japan Mentors: Gautam BISWAS, Vanderbilt University, USA Ben du BOULAY, University of Sussex, UK Stian HÅKLEV, EPFL, Switzerland Tsukasa HIRASHIMA, Hiroshima University, Japan Tatsunori MATSUI, Waseda University, Japan Yanjie SONG, The Education University of Hong Kong, Hong Kong Jennifer Pei Ling TAN, National Institute of Education, Singapore	
	Workshop W14: Playfulness in the teaching and learning of STE(A)M Chair: Bo JIANG, Zhejiang University of Technology, China #W14-01F: Learning logic, search and cracking through a number guessing game Tsui-Qin MOK, Wei Ming MAU, Calvin Weng Kit WONG, Kian Wheng KOAY, Meng Jeat CHENG, & Chien-Sing LEE #W14-02F: Adaptable Chinese Language Learning Card Game Kai-Kit WONG, Bisjuin Chew-Yun GOH, See-Lic SHUM, Soo-Juin LIM, Yet-Jun KAN, & Chien-Sing LEE #W14-03F: Effectiveness of Debugging-design in 2D Simulations to Facilitate STEAM Learning Tercia-Marie Tafadzwa TEMBO & Chien-Sing LEE	Room E
	 Workshop W12: Technology Enhanced Language Learning Chair: Pei-Lin LIU, National Chia-Yi University, Taiwan #W12-01S: Designing strategic mobile-assisted language learning activity aimed at minimizing cultural attributes Rustam SHADIEV, Yuliya HALUBITSKAYA, & Yueh-Min HUANG #W12-02F: Learning English Conversations in an Immersive Virtual Reality Environment Ji-Yeon JEONG, Su-Jong SEO, Ye-Jin HAN, Sun-Jung KIM, & Heisawn JEONG #W12-03S: Adopting a PBL Approach to Empower EFL Learners Wen-Chi Vivian WU, Yi-Ting Elsie LEE, Jie Chi YANG, Susy Marlyni DEBATARAJA, & Jun Scott CHEN HSIEH #W12-04F: Comparison among GTM, CLT, and Flipped Classrooms for optimal grammar acquisition Wen-Chi Vivian WU, Sri SUDARSI, Tomoya IKEZAWA, Anthony Y.H. LIAO, & Pei-Chun April CHEN 	Room F
10:30- 11:00 11:00- 12:30	Coffee/Tea Break	Rooms/ Lobby
	Tutorial 2 : Application of Text Analytics to Enhance Teaching and Learning Experience Tutors: Venky SHANKARARAMAN & Swapna GOTTIPATI, Singapore Management University, Singapore	Room LM









2/ Novem	nber 2018 (Tuesday)	
	Doctoral Student Consortia	Room BC
	Chairs: Sahana MURTHY, Indian Institute of Technology Bombay, India Hiroaki OGATA, Kyoto University, Japan	
	Mentors: Gautam BISWAS, Vanderbilt University, USA Ben du BOULAY, University of Sussex, UK Stian HÅKLEV, EPFL, Switzerland Tsukasa HIRASHIMA, Hiroshima University, Japan Tatsunori MATSUI, Waseda University, Japan Yanjie SONG, The Education University of Hong Kong, Hong Kong Jennifer Pei Ling TAN, National Institute of Education, Singapore	
;	Workshop W13: Diversified Endeavors of Implementing Computational Thinking in K-12 Education Chair: Longkai WU, Nanyang Technological University, Singapore #W13-02F: Improving on Guidance in a Gaming Environment to Foster Computational Thinking Sören WERNEBURG, Sven MANSKE, Jessica FELDKAMP, & H. Ulrich HOPPE #W13-01S: Perceptions of Teacher and Students towards Integrating Computational Thinking into Language Education: A Pilot Study Xiaojing WENG, Ching-Sing CHAI, Morris S. Y. JONG, & Gary K. W. WONG #W13-03S: Teaching Programming Languages using Robots based on Experiential Learning Kuo-Chen LI, Shih-Ming PI, & Hsiang-Ting LIN #W13-04S: Exploring Design Principles for Unplugged Pedagogy of Teaching Computational Thinking and Programming Liu LIU, Chee-Kit LOOI, & Longkai WU	Room D
;	Workshop W14: Playfulness in the teaching and learning of STE(A)M Chair: Bo JIANG, Zhejiang University of Technology, China #W14-04F: Towards personalized cognitive-social-affective engagement among active seniors: A case study on UX and inclusive design Chien-Sing LEE, Sheng-Yee GUY, & Shanice Wei-Ling CHAN #W14-05F: Reform of the Finnish Education System Marja-Liisa TENHUNEN	Room E
;	Workshop W12: Technology Enhanced Language Learning Chair: Pei-Lin LIU, National Chia-Yi University, Taiwan #W12-05S: Web-based Conversation Quest for Enhancing English Speaking Skills Cheng-Ting CHEN, Maiga CHANG, Kuan-Hsing WU, & Pei-Shan YU #W12-06F: An Introduction to a New Taxonomy of Apps for Vocabulary Learning Sihui LIU & Di ZOU #W12-07F: Using APP to assist students learning English Phrase Chiu-Jung CHEN & Pei-Lin LIU	Room F
12:30- 13:30	Lunch	Rooms/ Lobby









27 Nove	mber 2018 (Tuesday)	
13:30- 15:30	Early Career Workshop Chairs:	Room LM
	Hyo-Jeong SO, Ewha Womans University, South Korea	
	Maiga CHANG, Athabasca University, Canada Morris JONG, Chinese University of Hong Kong, Hong Kong	
	Advisors:	
	Heisawn JEONG, Hallym University, South Korea	
	Chen-Chung LIU, National Central University, Taiwan	
	Wen-Chi Vivian WU, Asia University, Taiwan	
	APSCE Student Wing Workshop: Academic Survival Tips Mentors:	Room B
	Tanja MITROVIC, University of Canterbury, New Zealand	
	Fu-Yun YU, National Cheng Kung University, Taiwan	
	Workshop W06: The 2nd Workshop on Digital Game-Based Learning and Gamification	Room C
	Instructional Strategies for K-12 Schools Chair: Shu-Ming WANG, Chinese Culture University, Taiwan	
	#W06-01F: Game Design and Learners' Attitude Based on Keyboard-Vocabulary-Learning-	
	Xiaohe YANG, Zhenhua WU, & Feng-Kuang CHIANG	
	#W06-02F: The Development and Preliminary Evaluation of a Chemistry Educational Virtual	
	Reality Game with Authentic Manipulation and Situated Learning	
	Chih-Chen KUO, Shu-Ming WANG, Kuang-Chung HAO, Chang-Hsin WU, & Huei-Tse HOU #W06-03F: Research of Educational Board Games on Learning Effectiveness and Flow State	
	Chih-Ming CHU	
	#W06-04F: Using Mobile Game-like Simulation to Promote Inquiry-based Laboratory	
	Learning in Elementary School Science	
	Daranee JAIMEETHAM & Niwat SRISAWASDI	
	Tutorial 3 (Invited Tutorial) : Introduction to Computational Thinking (CT)	Room D
	Tutors: H. Ulrich HOPPE, University of Duisburg-Essen, Germany	
	Chee-Kit LOOI, Nanyang Technological University, Singapore	
	Gautam BISWAS, Vanderbilt University, USA	
	Workshop W07: Analysis and Design of Problems/Questions: The 11th Workshop on	Room E
	Technology Enhanced Learning by Posing/Solving Problems/Questions	
	Chairs: Kazuaki KOJIMA, Teikyo University, Japan & Jon MASON, Charles Darwin University,	
	Australia #W07-02F: Experimental Use of Problem-Posing Exercise System for Efficient Calculation	
	to Promote Relational Interpretation of Numerical Expression	
	Hiroyoshi ENOMOTO, Yusuke HAYASHI, & Tsukasa HIRASHIMA	
	#W07-05F: Proposal of an Adaptive Programming-Learning Support System Utilizing	
	Structuralized Tasks	
	Kento KOIKE, Takahito TOMOTO, Tomoya HORIGUCHI, & Tsukasa HIRASHIMA	
	#W07-03F: A Vocal Approach in Measuring Critical Thinking Skill in Elementary School Students	
	Xuan-Yang HUANG, Sie Wai CHEW, & Nian-Shing CHEN	
	#W07-04S: Preliminary Study on Fostering Computational Thinking by Constructing a	
	Cognitive Model	
	Kazuaki KOJIMA & Kazuhisa MIWA	









ember 2018 (Tuesday)	
 Workshop W04: Innovative technologies for enhancing interactions and learning motivation Chair: Jerry Chih-Yuan SUN, National Chiao Tung University, Taiwan #W04-01 (Invited Speech): Automatically detecting academic emotions and motivation in blended learning environment: The use of a supervised machine learning approach Sunny San-Ju LIN #W04-02F: The Impacts of an Academic English Competitive Mahjong Game on Learners' Motivation	Room F
Coffee/Tea Break	Rooms/ Lobby
Early Career Workshop Chairs: Hyo-Jeong SO, Ewha Womans University, South Korea Maiga CHANG, Athabasca University, Canada Morris JONG, Chinese University of Hong Kong, Hong Kong Advisors: Heisawn JEONG, Hallym University, South Korea Chen-Chung LIU, National Central University, Taiwan Wen-Chi Vivian WU, Asia University, Taiwan	Room LM
APSCE Student Wing Workshop: Academic Writing Speaker: Sherry Y. Chen, National Central University, Taiwan	Room BC
16:00-17:00 Tutorial 3 (Invited Tutorial) : Introduction to Computational Thinking (CT) <i>Tutors:</i> H. Ulrich HOPPE, University of Duisburg-Essen, Germany Chee-Kit LOOI, Nanyang Technological University, Singapore Gautam BISWAS, Vanderbilt University, USA	Room D
 Workshop W07: Analysis and Design of Problems/Questions: The 11th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions Chairs: Kazuaki KOJIMA, Teikyo University, Japan & Jon MASON, Charles Darwin University, Australia #W07-01 (Poster/Demonstration): The Learning Potential of Student-Generated Feedback with Multimedia Shareability for Online Student-Generated Multiple-Choice Questions Fu-Yun YU #W07-06 (Poster/Demonstration): Design of Meta-Problem with Open Information Structure Approach Tsukasa HIRASHIMA & Yusuke HAYASHI Community Building: "Educational Use of Problems/Questions in Technology-Enhanced Learning" SIG 	Room E
	Workshop W04: Innovative technologies for enhancing interactions and learning motivation Chair: Perry Chih-Yuan SUN, National Chiao Tung University, Taiwan #W04-01 (Invited Speech): Automatically detecting academic emotions and motivation in blended learning environment: The use of a supervised machine learning approach Sunny San-Ju LIN #W04-02F: The Impacts of an Academic English Competitive Mahjong Game on Learners' Motivation Yu-Ming CHANG & Sherry Y. CHEN #W04-03F: An innovative approach to improving university students' situational interest using the wearable spherical video-based virtual reality Hota Chia-Sheng LIN, Shih-Jou YU, Jerry Chih-Yuan SUN, & Morris Siu Yung JONG #W04-04F: Applying Online Learning Environment for Argumentation of Students with Different Level of Prior-knowledge Bo-Wei LIU, Xin LIU, & Yu-Ren LIN Coffee/Tea Break Early Career Workshop Chairs: Hyo-Jeong SO, Ewha Womans University, South Korea Maiga CHANG, Athabasca University of Hong Kong, Hong Kong Advisors: Heisawn JEONG, Hallym University, South Korea Chen-Chung LIU, National Central University, Taiwan APSCE Student Wing Workshop: Academic Writing Speaker: Sherry Y. Chen, National Central University, Taiwan APSCE Student Wing Workshop: Academic Writing Speaker: Sherry Y. Chen, National Central University, Taiwan 16:00-17:00 Tutoris: H. Ulrich HOPPE, University of Duisburg-Essen, Germany Chee-Kit LOOI, Nanyang Technological University, Singapore Gautam BISWAS, Vanderbit University, USA Workshop W07: Analysis and Design of Problems/Questions: The 11th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions Chairs: Kazuák KOJIMA, Teikyo University, Japan & Jon MASON, Charles Darwin University, Australia #W07-01 (Poster/Demonstration): The Learning Potential of Student-Generated Feedback with Multimedia Shareability for Online Student-Generated Multiple-Choice Questions Fu-Yun YU #W07-06 (Poster/Demonstration): Design of Meta-Problem with Open Information Structure Approach Tsukasa HIRASHIMA & Yusuke HAYAS









27 Nove	mber 2018 (Tuesday)	
27 Nove	 Workshop W04: Innovative technologies for enhancing interactions and learning motivation Chair: Cheng-Yu HUNG, Central China Normal University, China #W04-05F: Engaging Children in Conversations during Story Reading Lynette Danielle CHAN & Ethel ONG #W04-06F: Application of multi-touch gestures in science education: Interactive digital simulation for improving students' understanding of optical imaging and learning motivation Yi-Xi LI, Lan-Lan MA, & Cheng-Yu HUNG #W04-07F: The effect of computer simulation designs on students' learning motivation and conceptual scientific understanding Lan-Lan MA, Yi-Xi LI, & Cheng-Yu HUNG #W04-08S: Investigating the Effects of Web-Based Instant Response System on Learning 	Room F
	and Teaching in Pre-Service Teacher Courses Hsin-Tzu (Tommy) CHEN	
18:30- 20:00	Welcome Reception	Ace Hotel and Suites









28 Nove	mber 2018 (Wednesday)	
09:00- 10:00	Opening Ceremony	Hall A & B
10:00- 11:00	Keynote Speech 1 : "Artificial Intelligence in Education – the next 10 years" Speaker: Benedict DU BOULAY, University of Sussex, UK Chair: Chee Kit LOOI, Nanyang Technological University, Singapore	Hall A & B
11:00- 11:30	Coffee/Tea Break	Hall A & B
11:30- 12:30	International Program Committee (IPC) Meeting (Open meeting) **All program committee members are welcome to attend this meeting Chair: Jie Chi YANG, National Central University, Taiwan	Hall A
	ALT/LA/DI-1 Chair: Stian HÅKLEV, École Polytechnique Fédérale de Lausanne, Switzerland #47F: Latent Dirichlet Allocation for Textual Student Feedback Analysis Swapna GOTTIPATI, Venky SHANKARARAMAN, & Jeff Rongsheng LIN #48S: Identifying Common Code Reading Patterns using Scanpath Trend Analysis with a Tolerance Christine Lourrine TABLATIN & Ma. Mercedes RODRIGO	Hall B
	EGG-1 Chair: Morris S.Y. JONG, The Chinese University of Hong Kong, Hong Kong BTDPN #104F: ctGameStudio – A Game-Based Learning Environment to Foster Computational Thinking Sören WERNEBURG, Sven MANSKE, & H. Ulrich HOPPE #79S: Development of Game-based learning Application for First Aid Awareness Marjory Faye DANDO, Princess Karen DE GUZMAN, Evander TAMPOS, & Francis BALAHADIA	Room BCD
	CUMTEL-1 Chair: Margus PEDASTE, University of Tartu, Estonia #140F: Mobile Based Inquiry Learning Application for Experiment Planning in the 8th Grade Chemistry Classroom Külli KALLAS & Margus PEDASTE #23S: Aesthetics of Web and Mobile Interfaces of a Learning Management System: A Comparative Analysis Nergiz KILINÇ & Ömer DELİALİOĞLU	Room E
	AIED/ITS/AL-1 Chair: Tsukasa HIRASHIMA, Hiroshima University, Japan #197F: Structure-mapping Support for Learning by Analogy with Kit-Build Concept Map Yusuke HAYASHI, Kan YOSHIDA, Keisuke MAEDA, Akira YAMANAKA, & Tsukasa HIRASHIMA #11S: Let's Take a Break: Analysis of the Incubation Effect Among Students Using a Learning Game for Physics May Marie P. TALANDRON & Ma. Mercedes T. RODRIGO	Room F
12:30- 13:30	Lunch	Hall A & B
13:30- 14:30	Keynote Speech 2: "ICT-enabled Teacher Professional Development at Scale for Quality Access to Education" Speaker: Cher Ping LIM, The Education University of Hong Kong, Hong Kong Chair: Ma. Mercedes T. RODRIGO, Ateneo de Manila University, Philippines	Hall A & B









28 November 2018 (Wednesday)		
14:30- 15:00	Coffee/Tea Break	Hall A & B
15:00- 18:00	15:00-16:30 TELL-1 Chair: Jiyou JIA, Peking University, China BOPN, BSPN #74F: An Investigation of Turkish EFL Teachers' Development through an Online Professional Development Program Behice Ceyda SONGÜL, Ömer DELİALİOĞLU, & Çağrı ÖZKÖSE BIYIK #186S: Score Prediction by SVM and its Implication for Japanese EFL Learners' Essay Evaluation Yuichi ONO, Takeshi KATO, & Brendan FLANAGAN #189S: Promoting Chinese Students' Participation in English classes by Mobile Learning Zhenzhen CHEN, Jiyou JIA, Qianqian CHENG, & Xu LIN	Hall A
	16:30-18:00 Panel 2: Designing an Innovative PBL Pedagogy to Empower Language Learners Chair: Wen-Chi Vivian WU, Asia University, Taiwan Panelists: Ching-Huei CHEN, National Changhua University of Education, Taiwan Lu-Fang LIN, National Taiwan Ocean University, Taiwan Lung-Hsiang WONG, Nanyang Technological University, Singapore Tosh YAMAMOTO, Kansai University, Japan	
	ALT/LA/DI-2 Chair: Tsuneo YAMADA, The Open University of Japan, Japan BOPN #66F: Using Sequence Analysis to Characterize the Efficiency of Small Groups in Large Online Courses Dorian DOBERSTEIN, Tobias HECKING, & H. Ulrich HOPPE #77F: Personalized Guidance on How to Review Paper-based Assessments Yancy Vance PAREDES, I-Han HSIAO, & Yiling LIN BTDPN #201F: A Temporal Model of Learner Behaviors in OELEs using Process Mining Ramkumar RAJENDRAN, Anabil MUNSHI, Mona EMARA, & Gautam BISWAS #90S: Application of Speech Recognition in a Japanese Dictogloss System Satoru KOGURE, Toshiaki NAKAHARA, Yasuhiro NOGUCHI, Tatsuhiro KONISHI, Makoto KONDO, & Yukihiro ITOH #117S: A Sustainable Training Method of Metacognitive Skills in Daily Lab-activities Ryo OGINO, Yuki HAYASHI, & Kazuhisa SETA #156S: Investigating Students' e-Book Reading Patterns with Markov Chains Gökhan AKÇAPINAR, Rwitajit MAJUMDAR, Brendan FLANAGAN, & Hiroaki OGATA #169S: A Learning Environment Case Study: Posing One-step Multiplication and Division Word Problems to Learners with Reading Disabilities Sho YAMAMOTO & Tsukasa HIRASHIMA	Hall B









15:00-17:00	Room BCD
EGG-2	
Chair: Ju-Ling SHIH, National University of Tainan, Taiwan #95S: An Investigation of the Influence of Learning Effectiveness and Motivations in a	
Taiwan History Digital Game – Govern Formosa	
Chang-Hsin LIN, Chien-Ming CHEN, Ju-Ling SHIH, Shu-Hsien HUANG, & Chia-Chun TSENG	
#126S: Design of a Game-Based Intelligent Learning Environment for Elementary Fraction	
Candy Joyce ESPULGAR, Jarl Brent OBEDOZA, Jazmine Veneth SACE, Ryan Samuel DIMAUNAHAN, & Raymund SISON	
#175S: Identifying Meaningful Gamification-Based Elements Beneficial to Novice Programmers	
Jenilyn AGAPITO & Ma. Mercedes RODRIGO	
#ES-09: Gender Difference in Internet Cognitive Fatigue and Gameplay Interest and	
Anxiety while They Played a Category Game with Attribute Classification Jon-Chao HONG, Mei-Syuan CHEN, & Jian-Hong YE	
#ES-12: Gender difference in abductive reasoning game playing	
Jon-Chao HONG, Tsai-Ru FANG, & Jian-Hong YE	
#ES-07: Groups difference in the use of inquiry-based learning platform of the flow	
experience, cognitive load and learning performance	
Jon-Chao HONG, Kuan-Cheng CHU, & Chi-Ruei TSAI	
17:00-18:00	
Community Building: "Educational Gamification and Game-based Learning (EGG)" SIG Chair: Morris S.Y. JONG, The Chinese University of Hong Kong, Hong Kong	
15:00-16:00	Room E
SIG Leaders' Meeting	
Chairs:	
Tsukasa HIRASHIMA, Hiroshima University, Japan Lung-Hsiang WONG, Nanyang Technological University, Singapore	
16:00-18:20	Room E
PTP-1 Chair: Longkai WU, Nanyang Technological University, Singapore	
BTDPN #112F: A Collaborative Video Annotation and Analytics Environment (CoVAA)	
Intervention: User Experiences and Reflections of Teacher-Practitioners	
Jennifer Pei-Ling TAN, Elizabeth KOH, Noriff Elyn MOHAMED ARIFFIN, Ee Zi TEO, Siu Hua	
TAY, & Shyam SINGH	
#143F: Learning experience interaction (LxI): Pedagogy for peer-connect in MOOCs	
Gargi BANERJEE, Jayakrishnan WARRIEM, & Shitanshu MISHRA #27S: Development of a Visualization-based System for Analyzing Teachers' Emotional	
Experience in Classroom Observation Activities Axi WANG, Shengquan YU, Ling CHEN, Xuemin GAO, & Dan WANG	
Experience in Classroom Observation Activities Axi WANG, Shengquan YU, Ling CHEN, Xuemin GAO, & Dan WANG #73S: Cascade Model of Teacher Professional Development: Qualitative Study of the	
Experience in Classroom Observation Activities Axi WANG, Shengquan YU, Ling CHEN, Xuemin GAO, & Dan WANG #73S: Cascade Model of Teacher Professional Development: Qualitative Study of the Desirable Characteristics of Secondary Trainers and Role of Primary Trainers	
Experience in Classroom Observation Activities Axi WANG, Shengquan YU, Ling CHEN, Xuemin GAO, & Dan WANG #73S: Cascade Model of Teacher Professional Development: Qualitative Study of the Desirable Characteristics of Secondary Trainers and Role of Primary Trainers Lucian Vumilia NGEZE, Ulfa KHWAJA, & Sridhar IYER	
Experience in Classroom Observation Activities Axi WANG, Shengquan YU, Ling CHEN, Xuemin GAO, & Dan WANG #73S: Cascade Model of Teacher Professional Development: Qualitative Study of the Desirable Characteristics of Secondary Trainers and Role of Primary Trainers Lucian Vumilia NGEZE, Ulfa KHWAJA, & Sridhar IYER #89S: Refining Conjecture Mapping for Design-based Research	
Experience in Classroom Observation Activities Axi WANG, Shengquan YU, Ling CHEN, Xuemin GAO, & Dan WANG #73S: Cascade Model of Teacher Professional Development: Qualitative Study of the Desirable Characteristics of Secondary Trainers and Role of Primary Trainers Lucian Vumilia NGEZE, Ulfa KHWAJA, & Sridhar IYER	









28 Nove	mber 2018 (Wednesday)	
	15:00-17:00 AIED/ITS/AL-2 Chair: Riichiro MIZOGUCHI, Japan Advanced Institute of Science and Technology, Japan #12F: Predicting Task Persistence within a Learning-by-Teaching Environment Cristina DUMDUMAYA & Ma. Mercedes RODRIGO #139F: Identifying teamwork indicators in an online collaborative problem-solving task: A text-mining approach Dhivya SURESH, Hsiang Hui LEK, & Elizabeth KOH	Room F
	#61S: Supporting Novices and Advanced Students in Acquiring Multiple Coding Skills Geela Venise Firmalo FABIC, Antonija MITROVIC, & Kourosh NESHATIAN #131S: Long-term Practice of Ontology Based Support System for Organizing Thoughts to Cultivate Intention Sharing Skills Natsumi MORI, Yuki HAYASHI, & Kazuhisa SETA #211S: Knowledge Tracing Within Single Programming Exercise Using Process Data Bo JIANG, Yun YE, & Haifeng ZHANG	
	17:00-18:00 Community Building: "Artificial Intelligence in Education/ Intelligent Tutoring Systems/ Adaptive Learning (AIED/ITS/AL)" SIG Chair: Amali WEERASINGHE, The University of Adelaide, Australia	Room F
18:30- 23:00	APSCE Executive Committee Meeting (Closed Meeting)	_









29 Nove	ember 2018 (Thursday)	
09:00- 10:00	Keynote Speech 3: "Thinking about Computational Thinking and How Learning Sciences Can Shape Deeper Learning of Computer Science in Schools" Speaker: Shuchi GROVER, Edfinity, USA Chair: Siu Cheung KONG, The Education University of Hong Kong, Hong Kong	Hall A & B
10:00- 10:30	Coffee/Tea Break	Hall A & B
10:30- 11:10	Theme-based Invited Speaker 1: "Creating a Technology-Rich English Language Learning Environment to Enhance Language Learning and Teaching" Speaker: Wen-Chi Vivian WU, Asia University, Taiwan Chair: Ting-Chia HSU, National Taiwan Normal University, Taiwan	Hall A
	CUMTEL-2 Chair: Rwitajit MAJUMDAR, Kyoto University, Japan #7S: Research on the Impact of e-Schoolbag on Teachers' Professional Development: from the Perspective of Teachers Yuan LIAO, Chu LIU, Dongmin QIAN, & Youqun REN #84S: Developing Agricultural Damage Simulation in the Impact of Typhoon and Flashflood in Laguna Oliver BALELA, Paul Julian MARONILLA, Michelle MAGPANTAY, & Francis BALAHADIA	Hall B
11:10- 12:30	11:10-11:30 TELL-2 Chair: Ting-Chia HSU, National Taiwan Normal University, Taiwan #180S: Image Recommendation for Informal Vocabulary Learning in a Context-aware Learning Environment Mohammad Nehal HASNINE, Kousuke MOURI, Brendan FLANAGAN, Gokhan AKCAPINAR, Noriko UOSAKI, & Hiroaki OGATA	Hall A
	11:30-12:30 Community Building: "Technology Enhanced Language Learning (TELL)" SIG Chair: Ting-Chia HSU, National Taiwan Normal University, Taiwan	
	CUMTEL-3 Chair: Yuichi ONO, Tsukuba University, Japan BOPN #178F: Student Questioning Tendencies and Learning Performances in a Classroom Inquiry Curriculum: An SEM Analysis Longkai WU, Chee-Kit LOOI, Meng-Leong HOW, & Sujin HE #53S: A Comparative Study on Achievement Degree of Teaching Objectives based on an Interactive AR Physical-Simulation Experimental Procedure Xiaojie NIU, Xueying XU, Lu CHENG, & Su CAI #163S: Adult Learners' Perspectives about Microlearning: Implications on the Design of Bite-Sized Content Hyo-Jeong SO, Seak-Zoon ROH, Jeong-Eun OH, Hyeran LEE, Jihyang LEE, & Seohyeon JI	Hall B









29 Nove	mber 2018 (Thursday)	
	PTP-2 Chair: Siu Cheung KONG, The Education University of Hong Kong, Hong Kong #158F: Training Teachers in "Action-oriented Learning" through "Action-oriented Learning" Yongwu MIAO, Li XIANG, & H. Ulrich HOPPE #15S: An Online Course for Learning Basic Statistics Concepts in Higher Education: An Evaluation Study Siu Cheung KONG #106S: Assessing Students' Mathematical Misconceptions through Concept Maps and Online Discussion Transcripts: Inner Product Spaces Kasiyah JUNUS	Room BCD
	EGG-3 Chair: Yi Chun LIU, Chia Nan University of Pharmacy and Science, Taiwan #167F: The Effect of Cognitive Styles and Guidance Strategies on Children's Performance in Learning Programming Chia-Yen FENG & Ming-Puu CHEN #72S: Igpaw: Loyola — Design of a Campus-Wide Augmented Reality Game Using MAGIS Eric Cesar E. VIDAL Jr., Melvin Luis MENDOZA, Japheth Duane SAMACO, John Michael SANTOS, Walfrido David DIY, Jonathan DL CASANO, Jenilyn L. AGAPITO, & Ma. Mercedes T. RODRIGO #179S: Blending Gamification and Augmented Reality in XploreRAFE+ Module: Intriguing Excitement and Promoting Collaborative Learning among Learners in Higher Education Mas Nida Md. KHAMBARI	Room E
	CSCL/LS-1 Chair: Nicole HUTCHINS, Vanderbilt University, United States #83S: Faith in the 'Digital Native' during online search in Australian home-schools Renee MORRISON #121S: Types of uncertainty and collaborative uncertainty management strategies evidenced during the engineering design process Navneet KAUR & Chandan DASGUPTA #ES-01: Core Research Publications of Learning Sciences and Computer-Supported Collaborative Learning Heisawn JEONG & Joomi KIM #ES-02: Creating and Sharing Multimedia Cases for Authentic Learning Young Hoan CHO, Mi Hwa KIM, & Ying ZHOU	Room F
12:30- 13:30	Lunch	Hall A & B
13:30- 15:00	Posters / Work-in-Progress Posters (WIPP)	Lobby
15:00- 15:30	Coffee/Tea Break	Hall A & B









29 Nov	ember 2018 (Thursday)	
15:30- 18:00	15:30-17:00 Panel 1: "Smartness of Technology" or "Smartness of Learners": Is it a Zero-Sum Game? Or Can We Have Both? Chair: Lung-Hsiang WONG, Nanyang Technological University, Singapore Panelists: Gautam BISWAS, Vanderbilt University, USA Ben DO BOULAY, University of Sessex, UK Ulrich HOPPE, University of Duisburg-Essen, Germany Riichiro MIZOGUCHI, Japan Advanced Institute of Science and Technology, Japan Discussant: Chee-Kit LOOI, Nanyang Technological University, Singapore	Hall A
	17:00-18:00 PTP-3 Chair: Yuichi ONO, Tsukuba University, Japan #41F: Sokrates Teaching Analytics System (STAS): An Automatic Teaching Behavior Analysis System for Facilitating Teacher Professional Development Oskar KU, Jen-Kai LIANG, Sung-Bin CHANG, & Michael WU #208F: Understanding and Developing In-Service Teachers' Perceptions towards Teaching in Computational Thinking: Two Studies Longkai WU, Chee-Kit LOOI, Liu LIU, & Meng-Leong HOW	
	CUMTEL-4	Hall B
	Chair: Noriko UOSAKI, Osaka University, Japan BSPN #92F: Analysis of Behavior Sequences of Students by Using Learning Logs of Digital Books Lingyu LI, Noriko UOSAKI, Hiroaki OGATA, Kousuke MOURI, & Chengjiu YIN #114F: Enhancing Spatial Cognition Skills Based on Cognitive Map Formulation Processes Ayumi YAMAZAKI, Yuki HAYASHI, & Kazuhisa SETA BTDPN #200F: GOAL: Supporting Learner's Development of Self-Direction Skills using Health and Learning Data Rwitajit MAJUMDAR, Yuan Yuan YANG, Huiyong LI, Gökhan AKÇAPINAR, Brendan FLANAGAN, & Hiroaki OGATA #62S: Class Discussion Management and Analysis Application Venky SHANKARARAMAN, Swapna GOTTIPATI, Sheshan RAMASWAMI, & Chirag CHHABLANI #64S: Modularization of Information Sharing System "SharedPanel" to Accommodate Inputs	
	from more SNSs and Expand Display Patterns Chikako NAGAOKA, Toshihiro KITA, Naoshi HIRAOKA, Hiroshi NAKANO, & Katsuaki SUZUKI #25S: Exploring Chinese Undergraduate Students' Perceptions of Collaboration and Satisfaction in the Context of Online Collaborative Learning Si ZHANG, Wenli CHEN, & Chee Kit LOOI	









5:30-17:00	Room BCI
LT/LA/DI-3	
hair: Stian HÅKLEV, École Polytechnique Fédérale de Lausanne, Switzerland	
154F: Learner's Annotative Activity as a Data Source of Personalized Web Services	
Recommendation	
Omar MAZHOUD, Anis KALBOUSSI, & Ahmed Hadj KACEM	
98S: Design and Evaluation of a 360 Degrees Interactive Video System to Support	
Collaborative Training for Nursing Students in Patient Trauma Treatment	
Romain C. HERAULT, Alisa LINCKE, Marcelo MILRAD, Elin-Sofie FORSGARDE, Carina	
ELMQVIST, & Anders SVENSSON	
198S: Sectional Review Recommendations based on Learner's Comprehension in Vid based Learning	-
Yusuke HAYASHI, Keisuke MAEDA, Toshio HONDA, & Tsukasa HIRASHIMA	
ES-06: Using VoiceThread to Facilitate Students' Engagement and Social Presence in	
Online Course Discussions	
Chen GUO & Xiangdong CHEN	
hair: H. Ulrich HOPPE, University of Duisburg-Essen, Germany	
GG-4	Room E
hair: Wen-Chi Vivian WU, Asia University, Taiwan	
OPN, BSPN #68F: A Review of Empirical Studies on Educational Games: 2013-2017 Jialing ZENG & Junjie SHANG	
129F: Design of a Game-Based Intelligent Learning Environment for Elementary Geol Luis MADRIGAL, Neil ROMBLON, Maynard SI, Ryan DIMAUNAHAN, & Raymund SISON	try
196F: Teaching Design Thinking Using Online Whiteboarding in a Graduate-level Dig	1
Innovation Course	
Wisam ZAQOOT & Lih-Bin OH	
69S: Values and Design Strategies of Emotional Design in Educational Games	
Mingze YUAN & Junjie SHANG	
146S: Toward an Outcome-Based Methodology for Developing Game-Based Learning	
Environments	
Raymund SISON, Candy ESPULGAR, Luis MADRIGAL, Jarl Brent OBEDOZA, Neil ROMBL Jazmine SACE, & Maynard SI	,
ES-08: How to Support Fraction Learning with Math Game "Run Fraction": Theory, De	jn
Junjie SHANG, Lu ZHANG, Ruonan HU, Sijie MA, Jialing ZENG, Mingze YUAN, & Jingang	18.1
ES-08: How to Support Fraction Learning with Math Game "Run Fraction": Theory, De and Application	









29 Nover	nber 2018 (Thursday)	
	CSCL/LS-2 Chair: Navneet KAUR, Indian Institute of Technology Bombay, India #9F: Gaze Collaboration Patterns of Successful and Unsuccessful Programming Pairs Maureen VILLAMOR & Ma. Mercedes RODRIGO BTDPN #136F: Preliminary Study on the Use of Reciprocal Kit Build for Collaborative Learning Lia SADITA, Tsukasa HIRASHIMA, Yusuke HAYASHI, Warunya WUNNASRI, Jaruwat PAILAI, Kasiyah JUNUS, & Harry Budi SANTOSO #182F: 'Touchy-Feely Vectors' changes students' understanding and modes of reasoning DurgaPrasad KARNAM, Harshit AGRAWAL, & Sanjay CHANDRASEKHARAN #168S: The Effect of Integrating Algebraic Thinking in Problem-Based Learning via Virtual Environment among Secondary School Students Najihah MUSTAFFA, Mohd Nihra Haruzuan MOHAMAD SAID, Zaleha ISMAIL, & Zaidatun TASIR #58S: Lecturers' perceptions of the acceptance of the Systematic Analysis of Learner Self Appraisal (SALSA) software Dobrila LOPEZ #ES-04: A Digital Formative Assessment of Teamwork in Collaborative Inquiry Student Teams Yi Huan TEE & Elizabeth KOH	Room F
19:00- 22:00	Banquet	Marco Polo Ortigas









30 November 2018 (Friday)		
09:00- 10:00	Keynote Speech 4: "Towards Personalized Support for Learning Transferable Skills via Active Video Watching" Speaker: Tanja MITROVIC, University of Canterbury, New Zealand Chair: Riichiro MIZOGUCHI, Japan Advanced Institute of Science and Technology, Japan	Hall A & B
10:00- 10:30	Coffee/Tea Break	Hall A & B
10:30- 11:10	Theme-based Invited Speaker 2: "Design, implement and orchestrate mobile and seamless learning in school education: A pedagogical perspective" Speaker: Yanjie SONG, The Education University of Hong Kong, Hong Kong Chair: Chengjiu YIN, Kobe University, Japan	Hall A
	PTP-4 Chair: Wen-Chi Vivian WU, Asia University, Taiwan #78S: A Learning Support System for Visualizing Behaviors of Students' Programs Based on Teachers' Intents of Instruction Koichi YAMASHITA, Daiki TEZUKA, Satoru KOGURE, Yasuhiro NOGUCHI, Tatsuhiro KONISHI, & Yukihiro ITOH #195S: Predictors of Cyber-plagiarism: The Case of Jose Rizal University Ryan EBARDO	Hall B
11:10- 12:30	Panel 3 (Invited Panel): An International Forum on Computational Thinking Education in K- 12: Why, What and How Computational Thinking Education is Being Implemented in Different Parts of the World? Chairs: Siu Cheung KONG, The Education University of Hong Kong, Hong Kong Chee Kit LOOI, Nanyang Technological University, Singapore Panelists: Marcelo MILRAD, Linnaeus University, Sweden Chee Kit LOOI, Nanyang Technological University, Singapore Siu Cheung KONG, The Education University of Hong Kong, Hong Kong Discussant: Gautam BISWAS, Vanderbilt University, USA	Hall A
	ALT/LA/DI-4 Chair: Judith AZCARRAGA, De La Salle University, Philippines BSPN #52F: A Scaffolding Tool to Assist Learners in Argumentation Abilities Cheng-Yu FAN, Chia-Ying LEE, Jui-Yi WANG, Yu-Ling HUANG, & Gwo-Dong CHEN #60F: Semi-Automated Assessment of SQL Schemas via Database Unit Testing Nigel STANGER #ES-05: Analysis and Visualization of Group Discussion Based on Sound Source Angle Obtained Using Kinect Junichi TAGUCHI, Izumi HORIKOSHI, & Yasuhisa TAMURA	Hall B









50 NOVE	ember 2018 (Friday)	
	CUMTEL-5	Room BCD
	Chair: Ivica BOTICKI, University of Zagreb, Croatia #59S: Re-Thinking Out-of-School Learning in Rural Pakistan Faisal BADAR, Jon MASON, & Khalid KHAN	
	#108S: A novel feedback system for pedagogy refinement in large lecture classrooms Pankaj CHAVAN, Shreya GUPTA, & Ritayan MITRA	
	#138S: Identifying Patterns in Computational Thinking Problem Solving in Early Primary Education	
	Ivica BOTIČKI, Petar KOVAČEVIĆ, Danica PIVALICA, & Peter SEOW #147S: Research on the design of parent-child worksheet in the museum context Xiaochen WANG, Yuxuan LIU, Yihan ZHANG, Mengrong LIU, & Peng CHEN	
	CSCL/LS-3 Chair: Durga Prasad KARNAM, HBCSE, Tata Institute of Fundamental Research, Mumbai, India #14F: Impact of Pair Programming Dynamics and Profiles to Pair Success Maureen VILLAMOR & Ma. Mercedes RODRIGO #144S: Enhancing a techno-pedagogical tool for student teamwork growth Varun K ADVANI, Elizabeth KOH, Yi-Huan TEE, Dhivya SURESH, & Jennifer Pei-Ling TAN #193S: A Dialogue Model for Collaborative Storytelling with Children Dionne Tiffany ONG, Christine Rachel DE JESUS, Luisa Katherine GILIG, Junlyn Bryan ALBURO, & Ethel ONG	Room E
	AIED/ITS/AL-3 Chair: Tanja MITROVIC, University of Canterbury, New Zealand #24F: Identifying Student Learning Patterns with Semi-Supervised Machine Learning Models Jeffrey MATAYOSHI & Eric COSYN #93S: Identifying Changes in Math Identity Through Adaptive Learning Systems Use Stefan SLATER, Jaclyn OCUMPAUGH, Ryan BAKER, Junyi LI, & Matthew LABRUM #173S: Inferring Academic Emotion in Online Learning based on Spontaneous Facial Expression Cun-Ling BIAN, De-Liang WANG, Ya ZHANG, & Wei-Gang LU	Room F
12:30- 13:30	Lunch	Hall A & B
13:30- 14:10	Theme-based Invited Speaker 3: "STEAMing the ships for the Great Voyage—The innovative design and practice of an interdisciplinary education" Speaker: Ju-Ling SHIH, National University of Tainan, Taiwan Chair: Maiga CHANG, Athabasca University, Canada	Hall A
	CUMTEL-6 Chair: Brendan FLANAGAN, Kyoto University, Japan #160S: Lecturer's Silhouette Display System for Distance Education Using Screen Sharing between Interactive Whiteboards Satoru KOMATSU, Yasuo MIYOSHI, Yuichiro MORI, & Ryo OKAMOTO #177S: Augmented Reality in Innovating Pedagogy: Ethical Issues on Persuasive Technologies Hazel A. TRAPERO	Hall B









30 November 2018 (Friday)			
14:10- 15:30	14:10-14:30 ALT/LA/DI-5 Chair: Judith AZCARRAGA, De La Salle University, Philippines #159S: Learner Centered Requirements for Enhancing an Existing Software Architecture to Support Learning Using On-line Videos Dan KOHEN-VACS, Marcelo MILRAD, & Alejandro SPIEGEL 14:30-15:30 Community Building: "Advanced Learning Technologies (ALT), Open Contents, and Standards" SIG Chair: Jon MASON, Charles Darwin University, Australia	Hall A	
		=	
	CUMTEL-7 Chair: Chengjiu YIN, Kobe University, Japan #184S: Application of Microcontrollers for Fostering Computational Thinking by Using the Calliope System in School Tanja LÜBBERS & Marc JANSEN #190S: Influence of Individual Differences on Learning with Digital Textbooks Young Hoan CHO, Sun Young HUH, & Gyu Tae JO #192S: Students' perspective of Social Media Role in Technical and Vocational Education and Training (TVET) Didin WAHYUDIN, Yoyo SOMANTRI, Erik HARITMAN, & Shinobu HASEGAWA	Hall B	
	TELL-3 Chairs: Anneli HERSHMAN & Juliana NAZARÉ, Massachusetts Institute of Technology, USA BTDPN #6F: Family Learning Coach: Engaging Families in Children's Early Literacy Learning with Computer-Supported Tools Anneli HERSHMAN, Juliana NAZARE, Ivan SYSOEV, Lauren FRATAMICO, Juanita BUITRAGO, Mina SOLTANGHEIS, Sneha MAKINI, Eric CHU, & Deb ROY #28S: Towards the Development of a Computer-based Game for Phonemic Awareness Rex BRINGULA, Ma. Mercedes T. RODRIGO, Jaclyn L. OCUMPAUGH, Kaska PORAYSKA- POMSTA, Ibukun OLATUNJI, & Rose LUCKIN #63S: Becoming Better Versed: Towards the Design of a Popular Music-based Rhyming Game for Disadvantaged Youths Jaclyn L. OCUMPAUGH, Ma. Mercedes T. RODRIGO, Kaśka PORAYSKA-POMSTA, Ibukun OLATUNJI, & Rose LUCKIN	Room BCD	
	CSCL/LS-4 Chair: Elizabeth KOH, National Institute of Education, Singapore BOPN, BSPN #204F: Studying Synergistic Learning of Physics and Computational Thinking in a Learning by Modeling Environment Nicole HUTCHINS, Gautam BISWAS, Luke CONLIN, Mona EMARA, Shuchi GROVER, Satabdi BASU, & Kevin McELHANEY #172S: Strategies for Idea Improvement using an Idea-Centric Discourse Analysis Alwyn Vwen Yen LEE & Seng Chee TAN #170S: Characterizing Individual Gaze Patterns of Pair Programming Participants Maureen VILLAMOR & Ma. Mercedes RODRIGO	Room E	









30 November 2018 (Friday)			
	AIED/ITS/AL-4 Chair: Ma. Mercedes T. RODRIGO, Ateneo de Manila University, Philippines #30F: Modeling the Learning That Takes Place Between Online Assessments Ryan S. BAKER, Sujith M. GOWDA, & Eyad SALAMIN BOPN, BSPN #36F: The Implications of a Subtle Difference in the Calculation of Affect Dynamics Shamya KARUMBAIAH, Juliana Ma. Alexandra L. ANDRES, Anthony F. BOTELHO, Ryan S. BAKER, & Jaclyn OCUMPAUGH	Room F	
15:30- 16:30	Closing Ceremony	Hall A & B	









Posters (P) and Work-in-Progress Posters (WIPP)

C1: AIED/ITS/AL

- #17P: Generating Abstract and Real-World Coding Exercises with Adjustable Difficulty

 Thomas James TIAM-LEE & Kaoru SUMI
- #67P: Cluster-based Outlier Analysis of Carefulness Among Students using Physics Playground Michelle BANAWAN & Ma. Mercedes RODRIGO
- #88P: Investigating the Generalizability of Affect Detectors from Facial Expressions Emily TABANAO & Ma. Mercedes RODRIGO
- #113P: Design of Problem-Posing Exercise for Efficient Calculation Hiroyoshi ENOMOTO, Yusuke HAYASHI, & Tsukasa HIRASHIMA
- #124P: Real-time Estimation of Learners' Mental States from Learners' Physiological Information Using Deep Learning
 - Yoshimasa TAWATSUJI, Tatsuro UNO, Siyuan FANG, & Tatsunori MATSUI
- #133P: Historical Cartoon Semantics Based Learning Support to Enhance Historical Interpretation Daiki MUROYA, Kazuhisa SETA, & Yuki HAYASHI
- #WIPP-02: The Case Study of a Flipped Classroom Using an Adaptive Learning System Haruki UENO, Tatsumi KATO, Kenichi FUKAMACHI, Hitoshi TATENO, Hiroto YAMAKAWA, & Hiroshi KOMATSUGAWA
- #WIPP-05: Exploring Self-regulated Learning Behaviors in a Negotiated Online Reading Assessment Hercy N. H. CHENG, Liansheng JIA, Xiaotong ZHANG, Calvin C. Y. LIAO, & Jianwen SUN
- #WIPP-06: Fostering Students' Idea Generation through Corpus –based Recommendation in Online Writing Environment
 - Calvin C. Y. LIAO, Hercy N. H. CHENG, & Wan-Chen CHANG
- #WIPP-09: A Trial Study about the Effect of Hi-Speeded Educational Video Utilizing Synthetic Speech Toru NAGAHAMA, Masahiro MAKINO, & Yusuke MORITA
- #WIPP-12: Comment Generation by LSTM for Procedure Learning System Akiyoshi TAKAHASHI, Hiromitsu SHIINA, & Nobuyuki KOBAYAHSHI
- #WIPP-17: Learners' Need for Including Teachers' Moving Images in Online Learning Video Materials Hideaki SHIMADA

C2: CSCL/LS

- #37P: A systematic review of computational thinking: Analysing research hot spots and trends by CiteSpace
 - Peng CHEN, Yang TIAN, Wei ZHOU, & Ronghuai HUANG
- #171P: Community of Inquiry: An instructional approach to promote collaborative learning in blended learning
 - Lingling GONG
- #174P: Exploring teachers' knowledge and beliefs for developing knowledge-building environments Huang-Yao HONG, Pei-Yi LIN, & Chiu-Pin LIN
- #WIPP-08: Design and Improvement of e-Portfolio Configuration Guidelines for Adult Learners Naoshi Hiraoka, Chikako NAGAOKA, Makoto MIYAZAKI, Shin-Ichiro KUBOTA, Ryuichi MATSUBA, & Toshihiro KITA
- #WIPP-13: A proposed flipped classroom method: Using online collaboration to enhance students' out-ofclass oral academic English learning
 - Ian D. FISCHER, Jie Chi YANG, & Chih-Hung LAI
- #WIPP-15: Investigating Students' Choice for Online Communication Tools in Flipped Classroom Katerina EVERS & Sufen CHEN









C3: ALT/LA/DI

#20P: Analysis of Basic Characteristics of Presented Instructional Materials and Study of Factors of Comprehension

Yasuhisa OKAZAKI & Atsushi YOSHIKAWA

#26P: Investigating the Learning Performance toward Geometry Learning in an Augmented Reality System

Chia-Hui CHENG, Fang-Ying YANG, Kaushal Kumar BHAGAT, Wei-Kai LIOU, Chun-Yen CHANG, & Yan ZHANG

#29P: Git as a support to assess students' contribution in teamwork Mélissa Clarisse NTIRANDEKURA & Thierry EUDE

#44P: A Block Programming Environment Enabling Online Peer Assessment for Promoting Collaborative Learning

Masanori FUKUI, Jo HAGIKURA, Tomoya BANSHO, Yuji SASAKI, Masakatsu KURODA, Jun MORIYAMA, & Tsukasa HIRASHIMA

#70P: Transferring Learning Footprints Across Versions within E-Book Reader Christopher Ching-Yuan YANG, Gokhan AKCAPINAR, Brendan FLANAGAN, & Hiroaki OGATA

#81P: VR Learning System to Support Active Locomoting Viewpoint for Astronomy Education Norio SETOZAKI, Yuya TOMINAGA, & Yusuke MORITA

#111P: Feature Extraction of Learners' Motivation from Peer Assessment Process Logs Izumi HORIKOSHI & Yasuhisa TAMURA

#123P: A Learning Support System for Understanding Pointers in C Language Based on Program Behavior Visualization

Satoru KOGURE, Yun YE, Koichi YAMASHITA, Yasuhiro NOGUCHI, Tatsuhiro KONISHI, & Yukihiro ITOH

#125P: A Presentation Robot for Promoting Model-based Self-Review Keisuke INAZAWA & Akihiro KASHIHARA

#127P: Assessment of Interactive Virtual Learning Environment to Observe Non-actual Phenomena through Explorative Activities

Yusuke MORITA, Yuyako MIYANISHI, & Toru NAGAHAMA

#191P: A Radial Basis Function Neural Network Prediction Model Based on Association Rules Meng-yuan CHEN, Morris Siu-yung JONG, Ming-wen TONG, & Ching-sing CHAI

C4: CUMTEL

#39P: Designing a Virtual Reality Flight Simulator Ilona HALIM, John CASEY, & Nilufar BAGHAEI

#56P: Design and Effectiveness of Instruction model for learning, assessment and utilization in Smart Classroom

Jing CHEN, Zhixun ZHOU, Xianlong XU, & Xiaoqing GU

#135P: Proposal of Balloon Type Drone for Overhead Shooting in Remote Joint Classroom Ryo OKAMOTO, Yasuo MIYOSHI, & Yuichiro MORI

#153P: How We Can Support International Students' Job Hunting in Japan Seamlessly Noriko UOSAKI, Kousuke MOURI, Chengjiu YIN, & Hiroaki OGATA

#183P: Seamless Learning Infrastructure for Finding Relationships Between Lectures and Practical Training

Kousuke MOURI, Mohammad Nehal HASNINE, Takafumi TANAKA, Uosaki NORIKO, Chengjiu YIN, Atsushi SHIMADA, & Hiroaki OGATA

#WIPP-01: An Online Service Encouraging Museum Visitors to Learn Related Research Fields Chikako NAGAOKA, Naoshi HIRAOKA, & Toshihiro KITA









C5: EGG

#122P: Tocky Talk: A Mobile Phone Application to Help Address Communicative Problems of Engineering and Technical Graduates in the Philippine Context

Samantha Jade SADURAL, Kathleen Gay FIGUEROA, Noel Nicanor II SISON, Francis Miguel QUILAB, Alain Andrew BOQUIREN, Kiel GONZALES, Janelle TAN, Mario CARREON, & Celine SUGAY

#176P: Experiencing the Journey of Confucius and Learning in a Virtual Reality-based Game Zhi-Hong CHEN & Ting-Wei YANG

#WIPP-03: The Development and Evaluation of an Educational Board Game Integrated with Augmented Reality, Role-Playing, and Situated Cases for Anti-Drug Education

Cheng-Tai LI, Su-Han KENG, You-Yun LI, Ying-Sang FANG, & Huei-Tse HOU

#WIPP-11: Designing the Integration of Hexad User Type Gamification Elements to XIPHIAS Joshua Daniel LOPEZ, Philip Joseph CACERES, Dean Simon DAMASIG, & Jonathan CASANO

C6: TELL

#101P: Digital Storytelling for EFL University Students

Ying-Hsueh CHENG & Yi Chun LIU

#151P: Integrating the Online Collaborative Tool into Oral Training

Yi Chun LIU & Ying-Hsueh CHENG

#181P: Generalization-based Learning Support System for Understanding Way to Use English Words Tomoko KOJIRI & Takushi YAMADA

#WIPP-16: Technology Enhanced English Language Labs in Multilinguistic Public Schools in India -- Pilot Intervention

Panchalee TAMULEE, Deepa BALASUBRAMANIAN, & Aryadev A. R.

C7: PTP

#32P: Factors Influencing Peer Online Citing Behavior

Fu-Yun YU & Shannon SUNG

#119P: Comparative Analysis of Current Situation of Education Informatization in Urban and Weak Areas in China

Yi-Yang ZHAO & Dong-Ming QIAN

#120P: An Empirical Study on the Influence of Urban-rural Consortium on Teacher Development in Poor Districts

Xing-Juan WANG & Dong-Ming QIAN

#161P: Differences of university's ICT introduction effects by the university scale and the presence of technical or educational support system

Yasuhiko TSUJI, Mieko TAKAHIRA, Rieko INABA, & Mana TAGUCHI

#185P: Improvisation of Circuit Design and Analysis Skills of students for Analog Electronics Course Using Virtual labs

Swati MAHAJAN, Anita DIWAKAR, Amey GAWADE, Kartik PATEL, & Ruchira JADHAV

#205P: Automatic Generation of Contents Models for Digital Learning Materials Brendan FLANAGAN, Gökhan AKÇAPINAR, Rwitajit MAJUMDAR, & Hiroaki OGATA

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