

# Final Conference Program

## Hong Kong 2019

### Friday 8<sup>th</sup>, February 2019

08:30-18:50 Welcome Desk (closes for lunch: 12:30 – 13:45)  
(Room SEK106)

09:45-10:00 Session O – Opening Session

Room Lecture Theatre

**OPENING SESSION**

*Profs. Pedro Isaías and Wendy Hui*

10:00-11:00 Session KL1 – Keynote Presentation

Room Lecture Theatre

**CYBERSECURITY: CHALLENGES AND RECENT DEVELOPMENTS**

*by Kai-Lung Hui, Chair Professor, Department of Information Systems, The Hong Kong University of Science and Technology, Hong Kong*

11:00-11:30 Coffee Break

11:30-12:30 Session KL2 – Keynote Presentation

Room Lecture Theatre

**THE DIGITAL TRANSFORMATION OF K-12: FROM DIGITIZED CURRICULUM TO DEEPLY-DIGITAL CURRICULUM**

*by Cathie Norris, Regents Professor, University of North Texas, Denton, TX, USA and Elliot Soloway, Arthur F. Thurnau Professor, University of Michigan, Ann Arbor, MI, USA*

12:45-13:45 Lunch Break

14:00-15:45 Session FRP 8.1 - ITS

Human Computer Interaction and Usability // Social Integration

Room SEK104

*Chair: Tewfiq El Maliki*

**CORRELATION BETWEEN WEB PERFORMANCE AND USABILITY (F060)**

*Yuji Doken, Hajime Iwata, Junko Shirogane and Yoshiaki Fukazawa*

**PERSONALIZED SCHOLARLY ARTICLE RECOMMENDATIONS BASED ON THE RECURRENT NEURAL NETWORK AND PROBABILISTIC MODELS (F082)**

*Eric Brewer, Yiu-Kai Ng and Alisha Banskota*

**TARGETING THERAPEUTIC GAMES TO ADULTS WITH AUTISM SPECTRUM DISORDER (F110)**

*Joseph Bills and Yiu-Kai Ng*

**PARTITIONING FRAMEWORK USING ONTOLOGY (R112)**

*Euiin Choi, WonSeok Kim and Byambasuren Temuujin*

14:00-16:00 Session FP 8.2 - ICEduTech

Learner Orientation

Room SEK107

*Chair: Hagit Meishar-Tal*

**DEVELOPING A PRODUCTIVE KNOWLEDGE-BUILDING DISCOURSE THROUGH JUDGMENTS OF PROMISING IDEAS AND EPISTEMIC REFLECTION (F025)**

*Liang Chang, Qianqian Chen, Yuqin Yang and Xuan Qian*

**USING PHYSICAL LOGIC GATES TO TEACH DIGITAL LOGIC TO NOVICE COMPUTING STUDENTS (F074)**

*Wee Lum Tan and Sven Venema*

**CHARACTERIZING THE DYNAMICS AND TENSIONS IN THE SOCIAL PRACTICES OF LOW-ACHIEVING STUDENTS IN A KNOWLEDGE-BUILDING ENVIRONMENT (F020)**

*Yuqin Yang*

**AN EXPERIMENTAL STUDY OF AN EDUCATIONAL INTERVENTION TO CHANGE GOAL ORIENTATION (F116)**

*Mai Yokoyama and Kazuhisa Miwa*

**15:00-16:00 Tutorial**

**Room SEK108**

**A TASTE OF CLASSIFICATION TECHNIQUES – AN EDUCATIONAL DATA MINING TUTORIAL FOR BEGINNERS**

*by Dr. Dennis Fong, The Hong Kong Polytechnic University, Hong Kong*

**16:00-16:30 Coffee Break**

**16:30-18:30 Tutorial**

**Room SEK108**

**A TASTE OF CLASSIFICATION TECHNIQUES – AN EDUCATIONAL DATA MINING TUTORIAL FOR BEGINNERS**

*by Dr. Dennis Fong, The Hong Kong Polytechnic University, Hong Kong*

**16:30-18:40 Session FSP 8.3 - ICeduTech**

**International Higher Education // Curricular Evolution**

**Room SEK104**

**Chair: Paul Lam**

**DIVERSITY IMPLICATIONS OF ONLINE LEARNING OF CODING (F049)**

*Mathew Lane, Wendy Hui, Karen Murcia and Pornpit Wongthongtham*

**AN INVESTIGATION INTO THE EFFECTS OF PROGRAMMING WORKSHOP EXPERIENCES ON PARENTS' CONCERNS ABOUT PROGRAMMING EDUCATION IN ELEMENTARY SCHOOL (F076)**

*Yukiko Maruyama*

**COLLECTIVE WISDOM OF FLIPPED CLASSROOMS IN HONG KONG HIGHER EDUCATION: PREPARING FOR POTENTIAL CHALLENGES (F073)**

*Paul Lam, Carmen K. M. Lau and Chi Him Chan*

**FACULTY-STUDENTS ONLINE COMMUNICATION CHANNELS (S015)**

*Hagit Meishar-Tal and Efrat Pieterse*

**INVESTIGATING TEACHERS' PEDAGOGICAL PRACTICES AND BELIEFS REGARDING DEVELOPING CREATIVE THINKING IN ELEMENTARY SCHOOL STUDENTS (S149)**

*Yufeng Sun, Yanwen Long and Yuqin Yang*

**16:30-18:30 Session FSP 8.4 - STE**

**Sustainability and Environment // Education for Sustainability**

**Room SEK107**

**Chair: William K. Koomson**

**DEGRADATION OF WATER HYACINTH (EICHHORNIA CRASSIPES) TO VERMICOMPOST THROUGH APPLICATION OF THE VERMICOMPOSTING TECHNOLOGY (F028)**

*Mercy M. Manyuchi, Charles Mbohwa, Edison Muzenda, Trevor N. Mutusva and Miranda Mpeta*

**EDUCATION FOR SUSTAINABLE DEVELOPMENT IN THE EFL CLASSROOM: EXPLORING INTERSUBJECTIVITY (F024)**

*Jackson Ver Steeg Jr.*

**POTENTIAL TO USE BIO CHAR IN MERCURY REMOVAL FROM GOLD MINING TAILINGS WASTEWATER (F030)**

*Mercy M. Manyuchi, Charles Mbohwa and Edison Muzenda*

**INFORMATION MANAGEMENT IN ARCHITECTURE – OFF-GRID CAPABLE COMPLEX (S086)**

*Anna Brudnicka and Adam Rybka*

## Saturday 9<sup>th</sup>, February 2019

**08:30-16:00 Welcome Desk (closes for lunch: 12:30 – 13:45)**  
**(Room SEK106)**

**09:00-10:00 Posters Session**

**Room SEK107**

**Chair: Pedro Isaias**

**DEVELOPING A VIDEO CLIP FOR MATHEMATICS CLASS AT NIGHT HIGH SCHOOL (P025)**  
*Kentaro Hara, Yuki Watanabe and Katsuhiko Shimizu*

**AN ONLINE INTERCULTURAL EXCHANGE BETWEEN JAPANESE AND SPANISH STUDENTS AND SOME REFLECTIONS FOR FUTURE PROJECTS (P029)**  
*Lluís Valls Campà and Juan Manuel Díaz Ayuga*

**A TEXT-MINING ANALYSIS OF ONLINE REVIEWS ON CAR-SHARING SERVICES (P084)**  
*Yun Jik Jeong, Yeon Ji Yang, Jaehye Suk and Kee Ok Kim*

**AN OPINION MINING OF ONLINE TEXTS ON THE SOCIAL CURATION SERVICE, 'PINTEREST' (P095)**  
*Yeon Ji Yang, Yun Jik Jeong, Jaehye Suk and Kee Ok Kim*

**CONSUMER SUPPORT OR DISAPPROVAL OF COMPANIES AS REVEALED BY SOCIAL BIG DATA (P101)**  
*Jihyung Hong, Hyesun Hwang and Hyewon Lim*

**A STUDY OF CONSUMER INFORMATION LITERACY BY INFORMATION SEARCH TYPE (P102)**  
*Yu Lim Lee and Jae-Eun Chung*

**CONTINUOUS USE INTENTION OF MOBILE PAYMENT – COMPARISON OF ALIPAY AND WECHAT PAY (P105)**  
*Fa-Cheng Tan, Hyesun Hwang, Hyewon Lim, Joo-hyun Park and Ji-hyung Hong*

**CONSUMER RISK PERCEPTIONS IN CROSS-BORDER ONLINE SHOPPING: COMPARING FOUR COUNTRIES (P114)**  
*Minji Jung, Heesoon Yang and Jae-Eun Chung*

**NEW PROGRAMMING EDUCATION FOCUSING ON PROBLEM SOLVING SKILLS BY “POV-RAY” (P123)**  
*Jumpei Gohara, Yuki Watanabe, Akifumi Sako and Mitsuaki Fujita*

**09:00-11:00 Session FSP 9.1- ICEduTech**

**Education in Context // Other**

**Room SEK104**

**Chair: Hiroshi Kato**

**VOCABULARY SKILLS DEVELOPMENT AMONG STUDENTS: AN ETHNOGRAPHY (F061)**  
*Charito G. Ong, Elva S. Maramara, Sophomore T. Vacalares and K Marie D. Zambas*

**EXPLORING EMERGING MENTORING PRACTICES IN NEW ECOSYSTEMS OF LEARNING IN FINLAND (F128)**  
*Irja Leppisaari*

**DEVELOPING 21ST CENTURY INTERCULTURAL AND COLLABORATIVE COMPETENCIES THROUGH TRANSFORMATIVE INTERNATIONALISATION PROJECTS: A POST NEO-COLONIALISM APPROACH (S110)**  
*Pranit Anand and Byron Lui*

**STUDY OF A VISUALIZATION SYSTEM OF THE CONCENTRATION DEGREE BY BIOLOGICAL SIGNALS -CASE OF ACTIVE LEARNING- (S064)**  
*Kuniaki Yajima, Keiichi Yonemura, Yoshihiro Takeichi and Jun Sato*

**INVESTIGATION OF WHETHER UNDERGRADUATES CAN TAKE COLLECTIVE COGNITIVE RESPONSIBILITY IN THE KNOWLEDGE BUILDING PROCESS (S151)**  
*Qianqian Chen, Yuqin Yang and Chen Xu*

**10:00-11:00 Session FP 9.2 - STE**

**Sustainability and Green IT**

**Room SEK107**

**Chair: Wendy Hui**

**ANAEROBIC DIGESTION OF KITCHEN AND SEWAGE SLUDGE BIO WASTE TO BIOGAS USING ENGINEERED BIO CATALYSIS (F027)**  
*Mercy M. Manyuchi, Charles Mbohwa and Edison Muzenda*

**ANALYSIS OF COMBUSTION BEHAVIOR AND PHYSICAL PROPERTIES OF WATER-DIESEL (F082)**  
*Jonghan Won and Seung Wook Baek*

**11:00-11:30 Coffee Break**

**11:30-12:30 Session KL1 – Keynote Presentation**

**Room Lecture Theatre**

**USING COMPANION ROBOTS FOR RESEARCH AND EDUCATION**  
*by Professor Patrick C. K. Hung, Faculty of Business and IT, University of Ontario Institute of Technology, Canada*

**12:45-13:45 Lunch Break**

**14:00-16:00 Session FP 9.3 - ITS**

**Internet Technologies**

**Room SEK104**

**Chair: Yiu-kai Ng**

**SURVEY ON BLOCKCHAIN: A COMPLETE TECHNOLOGIES COMPARISON (F070)**

*Tewfiq El-Maliki, Noria Foukia and Oumayma Zelfani*

**SCALING AGILE FRAMEWORKS VS. TRADITIONAL PROJECT PORTFOLIO MANAGEMENT: COMPARISON AND ANALYSIS (F047)**

*Andreas Grundler and Markus Westner*

**FAULT-TOLERANT TOPOLOGY CONTROL FOR IOT NETWORKS USING VARIABLE K-CONNECTIVITY (F057)**

*Mitsumasa Ota, Ryuichi Takahashi and Yoshiaki Fukazawa*

**STABILITY-BASED LIVE MIGRATION USING DYNAMIC MARGIN (F062)**

*Ryu Sakamoto, Ryuichi Takahashi and Yoshiaki Fukazawa*

**14:00-16:00 Workshop**

**Room SEK107**

**MANAGING DIGITAL CURRICULA USING THE FREE, DEVICE-INDEPENDENT COLLABORATIVE ROADMAP SYSTEM**

*by Cathie Norris, Regents Professor, University of North Texas, Denton, TX, USA and Elliot Soloway, Arthur F. Thurnau Professor, University of Michigan, Ann Arbor, MI, USA*

**16:30 Social Event**

**Sunday 10<sup>th</sup>, February 2019**

**08:30-13:00 Welcome Desk**  
**(Room SEK106)**

**09:00-11:00 – Session FSP 10.1 - ICEduTech**

**Education as Professional Field // Recognizing Students' Learning Styles**

**Room SEK104**

**Chair: William K. Koomson**

**CODECHUM: AN ONLINE LEARNING AND MONITORING PLATFORM FOR C PROGRAMMING (F135)**

*Jemar Jude A. Maranga, Leilla Keith J. Matugas, Jorge Frederick W. Lim and Cherry Lyn C. Sta. Romana*

**CAPTURING MOBILE COLLABORATION IN ACTIVE LEARNING: LESSONS FROM A LONGITUDINAL MIXED METHODOLOGIES STUDY (F030)**

*Peter Ilic*

**COMMUNICATIVE TEACHING IN THE TERTIARY LEVEL (S057)**

*Charito G. Ong, Elva S. Maramara and Cipriana P. Flores*

**CHALLENGES AND SUPPORT FOR THE DEVELOPMENT OF NOVICE TEACHERS' PROFESSIONAL IDENTITIES (S114)**

*Fariza Khalid and Hazrati Husnin*

**DEPLOYMENT OF A GENERIC METHOD IN THE DESIGN OF DIGITAL LEARNING ENVIRONMENTS USING A COLLABORATIVE AUTHORING TOOL (S138)**

*Carlos Bohorquez and Pascal Marquet*

**11:00-11:30 Coffee Break**

**11:30-12:50 Session FSP 10.2 - ITS**

**e-Government / e-Governance**

**Room SEK104**

**Chair: Tewfiq El Maliki**

**EXPLORING THE BEHAVIORAL INTENTION TO USE E-GOVERNMENT SERVICES: VALIDATING THE UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (F098)**

*Mark Anthony Camilleri*

**CO-DESIGN TO SELF-ORGANIZING EXERGAMING – A STUDY OF STIMULATING PHYSICAL ACTIVITY FOR ELDERLY PEOPLE WITH A CHRONIC HEALTH CONDITION (F080)**

*Linda Askenäs, Jan Aidemark, Tiny Jaarsma, Anna Sitrömberg and Leonie Klompstra*

**CLOUD PLATFORM FOR WASTE MANAGEMENT INDUSTRY IN RUSSIA (S039)**

*Vyacheslav Chernikov*

**11:30-12:50 Session FSP 10.3 - ICEduTech**

**Integrating Educational Technologies**

**Room SEK107**

**Chair: Fariza Khalid**

**ONTOLOGY OF UBIQUITOUS LEARNING: WHATSAPP MESSENGER COMPETES SUCCESSFULLY WITH LEARNING MANAGEMENT SYSTEMS (LMS) IN GHANA (F014)**

*William K. Koomson*

**EFFECTS OF INTERACTION STRATEGIES ON STUDENTS' MUSIC LISTENING WITH A MOBILE APPLICATION (F100)**

*Yoomee Baek and Sunggi Cho*

**LEARNING A LANGUAGE THROUGH GAMING: A MINECRAFT GAME DESIGN FOR NEGOTIATION OF MEANING AND CO-CONSTRUCTION OF KNOWLEDGE (S104)**

*Joeun Baek and Hyekyeong Park*

**12:50 Best Paper Awards Ceremony and Closing Session**

**Room SEK104**

**CLOSING SESSION**

*Profs. Pedro Isaías and Wendy Hui*