

# Final Conference Program

Sydney, Australia

**Monday 11<sup>th</sup>, December 2017**

**08:30-19:00 Welcome Desk**

**09:45-10:00 Session O – Opening Session  
Room 3**

**OPENING SESSION**  
*Pedro Isaias and Ana Hol*

**10:00-11:00 Session KL1 – Keynote Presentation  
Room 3**

**UNIVERSITIES IN 2020S**  
*by Associate Professor Ana Hol, Western Sydney University, Australia*

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

**11:30-13:00 Workshop  
Room 3**

**TEACHER DASHBOARDS: CRITICAL INSIGHTS AND INFORMED DESIGN CONSIDERATIONS**  
*by Associate Professor Pedro Isaias and Solange Lima, The University of Queensland, Australia*

**11:30-12:50 Session FSP 11.1  
International Higher Education  
Room 4**

*Chair: David Tuffley*

**BIBLIOMETRIC SCIENCE MAPPING AS A POPULAR TREND: CHOSEN EXAMPLES OF VISUALISATION OF INTERNATIONAL RESEARCH NETWORK RESULTS (F141)**  
*Eugenia Smyrnova-Trybulska, Nataliia Morze, Olena Kuzminska and Piet Kommers*  
**OPTIMIZE KNOWLEDGE SHARING, TEAM EFFECTIVENESS, AND INDIVIDUAL LEARNING WITHIN THE FLIPPED TEAM-BASED CLASSROOM (F082)**  
*Chung-Kai Huang, Chun-Yu Lin, Zih-Cin Lin, Cui Wang and Chia-Jung Lin*  
**MOOC AS A LABORATORY OF CULTURE SHOCK: HELPING NON-U.S. STUDENTS INTEGRATE INTO ALL-AMERICAN VIRTUAL ENVIRONMENT (S017)**  
*Valeri Chukhlomin and Anant Deshpande*

**11:30-12:30 Session FP 11.2  
Internet Technologies  
Room 2**

*Chair: Amy Trappey*

**MESSAGE DISSEMINATION BASED ON PRIORITY/INTEREST IN VEHICULAR NETWORKS (F073)**  
*Wataru Kurahashi, Noriko Matsumoto and Norihiko Yoshida*  
**EXTENDING BIOSCIENCE ONTOLOGY BASED ON COMPARISONS BETWEEN SIBLING CONCEPTS (F090)**  
*Takeshi Masuda, Kouji Kozaki, Tatsuya Kushida, Yuka Tateisi, Katsutarō Watanabe, Katsuji Matsumura, Takahiro Kawamura and Kazunori Komatani*

**13:00-14:30 Lunch Break**

**14:30-16:30 Session FSP 11.3**  
**e-Business / e-Commerce // Social Networking and Marketing**  
**Room 3**

**Chair: Shahriar Shirvani Moghaddam**

**AN EXPLORATION OF THE FACTORS THAT IMPACT CUSTOMER EXPERIENCE IN SOCIAL COMMERCE WEBSITES (F106)**

*Hasan Beyari, Ahmad Abareshi and Ismail Elferjani*

**OBM-CENTRIC DIGITAL MARKETING DEVELOPMENT FOR HIGH-TECH SERVICES – A CASE STUDY (F114)**

*Amy J.C. Trappey, Charles V. Trappey and Usharani Hareesh Govindarajan*

**THE IMPACT OF SOCIAL PRESENCE AND TRUST ON CUSTOMER LOYALTY TO SOCIAL COMMERCE WEBSITES (S091)**

*Hilal Alhulail, Martin Dick and Ahmad Abareshi*

**THE ROLE OF SOCIAL MEDIA IN THE MILITARY (S019)**

*Namosha Veerasamy and William Aubrey Labuschagne*

**THE SATISFACTION OF CUSTOMERS TOWARD SOCIAL COMMERCE WEBSITE: APPLYING INFORMATION SYSTEMS SUCCESS MODEL (S095)**

*Hilal Alhulail, Martin Dick and Ahmad Abareshi*

**14:30-16:20 Session FSP 11.4**  
**Integrating Educational Technologies // Other**  
**Room 4**

**Chair: Peter Bryant**

**DESIGN AND DEVELOPMENT OF AN INTERACTIVE MULTIMEDIA SIMULATION FOR AUGMENTING THE TEACHING AND LEARNING OF PROGRAMMING CONCEPTS (F042)**

*Leonah L. Baloyi, Sunday O. Ojo and Etienne A. Van Wyk*

**INTRODUCING TABLETS IN A PORTUGUESE SCHOOL: A MICOOOL PROJECT CASE STUDY ANALYSIS (F137)**

*Miriam Judge*

**COLLEGE COMMUNICATIVE TEACHING AND E-LEARNING: A TRAINING SCHEME (F128)**

*Charito G. Ong*

**COMMUNICATION SCAFFOLDS FOR PROJECT MANAGEMENT IN PBL (S127)**

*Shigeru Sasaki, Masayuki Arai, Kumiko Takai, Mitsuhiro Ogawa and Hiroyoshi Watanabe*

**16:30-17:00 Coffee Break**

**17:00-18:50 Session FSP 11.5**  
**Internet Technologies**  
**Room 3**

**Chair: Ana Hol**

**P2P LOAD DISTRIBUTION OF CONTENT DISTRIBUTION IN EDGE COMPUTING (F072)**

*Takuya Fukuda, Noriko Matsumoto, Norihiko Yoshida*

**A NOVEL RESOURCE REUSE ALGORITHM FOR DEVICE TO DEVICE COMMUNICATIONS (F075)**

*Shahriar Shirvani Moghaddam*

**FROM NETWORKING TO COLLABORATION: ROLE OF TRUST, RISK AND REWARDS IN ENHANCING ONLINE WORKING TOGETHER RELATIONS (F128)**

*Mousa Abu Kashef, Athula Ginige and Ana Hol*

**CONCEPT ORIENTED DATA AGGREGATION IN EDGE COMPUTING (S070)**

*Ryuichiro Hiranuma, Noriko Matsumoto and Norihiko Yoshida*

**17:00-18:40 Session FSP 11.6**  
**Sustainability and Green IT // Sustainability and e-Society**  
**Room 4**

**Chair: Mercy Manyuchi**

**DISCRIMINANT ANALYSIS AS A TOOL OF ASSESSING INDIVIDUAL CREDIT RISK IN POLAND'S COOPERATIVE BANKS (F037)**

*Rafal Balina and Slawomir Juszczak*

**VERMICOMPOSTING OF SOYBEAN AND MAIZE STRAW RESIDUES AS AN AGRO WASTE MANAGEMENT INITIATIVE (F024)**

*Musaïda Mercy Manyuchi, Charles Mbohwa and Edison Muzenda*

**E-WASTE: DISPOSAL BEHAVIOUR OF ICT PRODUCTS BY INDIAN HOUSEHOLDS (S021)**

*Venugopal Pingali and Gautam Pingali*

**HIGHER EDUCATION INSTITUTIONS AND THEIR PART IN THE GLOBAL SUSTAINABLE DEVELOPMENT AGENDA: ACCOUNTING FOR ACTORS AND OUTCOMES (S058)**

*Megan Power*

**17:00-19:00 Session FP 11.7**  
**Social Media and Social Networking // Motivating Students**  
**Room 2**  
**Chair: Dave Smith**

**IT DOESN'T MATTER WHAT IS IN THEIR HANDS: UNDERSTANDING HOW STUDENTS USE TECHNOLOGY TO SUPPORT, ENHANCE AND EXPAND THEIR LEARNING IN A COMPLEX WORLD (F096)**

*Peter Bryant*

**A COMPARATIVE STUDY ON SOCIAL MEDIA ADDICTION OF HIGH SCHOOL AND UNIVERSITY STUDENTS (F118)**

*Ali Simsek, Kemal Elciyar and Taner Kizilhan*

**COMPUTER LITERACY TEACHING USING PEER LEARNING AND UNDER THE CONFUCIAN HERITAGE CULTURAL SETTINGS OF MACAO, CHINA (F046)**

*Kelvin Wong, Ana Neves and Joao Negreiros*

**APPLYING SENSORS TO INVESTIGATE GENDER DIFFERENCES IN BEGINNING TENNIS PLAYERS (F091)**

*Chih-Hung Yu, Jye-Shyan Wang and Cheng-Chih Wu*

## **Tuesday 12<sup>th</sup>, December 2017**

**08:30-15:45 Welcome Desk**

**08:45-11:00 Session FRP 12.1**  
**Sustainability and Education**  
**Room 3**  
**Chair: Rafal Balina**

**UNIVERSITY THESES IN THE CONTEXT OF THE SUSTAINABILITY OF THE QUALITY OF EDUCATION AT UNIVERSITIES (F072)**

*Josef Malach and Kateřina Malachová*

**ENVIRONMENTAL EDUCATION AND ITS ROLE IN RESTORING NATIVE ECOSYSTEMS AT SAINT NARSAI ASSYRIAN CHRISTIAN COLLEGE, HORSLEY PARK (F133)**

*Ornilla Shamon, AnneMarie Clements, Anne Baumann, Grant Webster, Maddy Young and Rosemary Snowdon*

**FOR WHICH SOCIOECONOMIC SEGMENTS ARE PARENTAL EXPECTATIONS OF EDUCATIONAL ATTAINMENT MORE SENSITIVE TO THEIR CHILDREN PERFORMANCE? (F128)**

*Roberto Araya, Raúl Gormaz and Obed Ulloa*

**THE IMPOSSIBILITY OF TEAMWORK IN IRANIAN UNIVERSITY CLASSES: A STUDY OF ONE OF THE OBSTACLES TO THE REALIZATION OF SUSTAINABLE DEVELOPMENT IN A COUNTRY IN TRANSITION (F061)**

*Reza Samim*

**PILOT VERIFICATION OF "TOOLS FOR ADAPTIVE LEARNING" MODULE BY PHD STUDENTS AT UNIVERSITY OF OSTRAVA (R089)**

*Josef Malach, Tatiana Prextoová, Milan Chmura and Kateřina Kostolányová*

**09:00-11:00 Session FSP 12.2**  
**Educational Games // Learner Orientation**  
**Room 4**  
**Chair: Wee Lum Tan**

**REDESIGNING LEARNING SPACES: WHAT DO TEACHERS WANT FOR FUTURE CLASSROOMS? (F107)**

*Neuza Pedro*

**TESTED STRATEGIES FOR RECRUITING AND RETENTION OF STEM MAJORS (F037)**

*Sadegh Davari, Sharon Perkins-Hall and Krishani Abeysekera*

**DIGITAL PEDAGOGIES FOR TEACHERS' CPD (S140)**

*Matthew Montebello*

**SENSING LOCALLY IN THE GLOBAL ENVIRONMENT: USING SENSORS IN TEACHERS' EDUCATION (S124)**

*Maria João Silva, António Almeida, Bianor Valente, Margarida Rodrigues and Vítor Manteigas*

**THE USE OF A DIGITAL BADGE AS AN INDICATOR AND A MOTIVATOR (S120)**

*Jun Iwata, John Telloyan, Lynne Murphy, Shudong Wang and John Clayton*

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

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

**Room 3**

**THE FUTURE OF LEARNING TECHNOLOGIES IN HIGHER EDUCATION**

*Associate Professor Pedro Isaías, The University of Queensland, Brisbane, Australia*

**12:30-13:00 Posters Session**

**Room 3**

**Chair: Ana Hol**

**TRANSBASO : ENHANCING THE EDUCATIONAL AND SOCIAL EFFICIENCY OF THE TRANSITION BETWEEN PRIMARY AND SECONDARY EDUCATION (P122)**

*Christian Van Kerckhove*

**A SYSTEM FOR CLASS REFLECTION USING IPADS FOR REAL-TIME BOOKMARKING OF FEEDBACKS INTO SIMULTANEOUSLY RECORDED VIDEOS (P066)**

*Taira Nakajima*

**ROLES, STRATEGIES AND IMPACT OF MOOCS ON FLIPPING BUSINESS EDUCATION (P086)**

*Chung-Kai Huang, Chun-Yu Lin, Zih-Cin Lin and Cui Wang*

**GAMIFYING OUTDOOR SOCIAL INQUIRY LEARNING WITH CONTEXT-AWARE TECHNOLOGY (P139)**

*Morris Siu-yung Jong, Tom Chan, Vincent Tam and Ming-Tak Hue*

**13:00-14:30 Lunch Break**

**14:30-15:20 Session FSP 12.3**

**Educational Systems Design**

**Room 3**

**Chair: Neuza Pedro**

**THE USE OF MOBILE MESSAGING APPS TO SHARE INFORMATION AMONG LECTURERS IN BRAZIL (F086)**

*Marcos da Silva Araújo and Ricardo Rodrigues Barbosa*

**RECOGNITION OF HANDWRITTEN SCHEMATIC SYMBOLS AND ITS APPLICATION TO A WEB-BASED EDUCATION SYSTEM FOR ELECTRONIC CIRCUIT CONSTRUCTION (S110)**

*Atsushi Takemura*

**14:10-15:30 Session FSP 12.4**

**Internet Technologies // e-Health**

**Room 4**

**Chair: Namosha Veerasamy**

**SECURE IMAGE WATERMARKING IN COMPRESSED ENCRYPTED DOMAIN USING ASWDR COMPRESSION AND PAILLIER CRYPTOSYSTEM (F119)**

*Ritu Gupta, Anurag Mishra, Sarika Jain and Girija Chetty*

**GAMIFICATION IN E-MENTAL HEALTH: DEVELOPMENT OF A DIGITAL INTERVENTION ADDRESSING SEVERE MENTAL ILLNESS AND METABOLIC SYNDROME (F021)**

*Alec Shaw, David Paul, William Billingsley, Paul Kwan and Rhonda Wilson*

**INTEGRATING TECHNOLOGY, BUSINESS, USER AND ORGANIZATIONAL PERSPECTIVES IN EHEALTH SERVICE DEVELOPMENT (S140)**

*Jan Aidemark, Linda Askenäs and Niclas Eberhagen*

**15:45 Social Event**

## Wednesday, 13<sup>th</sup> December 2017

08:30-13:10 Welcome Desk

09:00-11:05 – Session FSRP 13.1

Social and Organizational Aspects

Room 3

Chair: *Atsushi Takemura*

**DIGITAL MARKET FORMATION: A CASE STUDY FROM COMMERCIAL LIGHTING INDUSTRY (F124)**

*Ashini Wesumperuma and Upul Gunawardana*

**REMIS CLOUD: A DISTRIBUTED INFORMATION MANAGEMENT SYSTEM FOR INTERDISCIPLINARY KNOWLEDGE LINKAGE (F082)**

*Daniel Kaltenthaler, Johannes-Y. Lohrer, Florian Richter and Peer Kröger*

**A LINKED OPEN DATA AND SEMANTIC CITIZEN VOCABULARY FOR PUBLIC ADMINISTRATION: A FIRST EXPLORATION AND IMPLEMENTATION (F087)**

*Martijn Hartog and Bert Mulder*

**PREDICTION OF AGRICULTURAL PRODUCTS PRICE WITH LSTM NETWORK (S143)**

*Sungho Shin, Mikyung Lee, Seongchan Kim and Sa-Kwang Song*

**ANALYSIS ON PERFORMANCE DIFFERENCE IN ICT PROJECTS WITH DIFFERENT CHARACTERISTICS IN KOREA (R079)**

*Jeong A. Choi, Mu Jeong Kang and Heein Yang*

08:50-11:00 – Session FSP 13.2

Motivating Students

Room 4

Chair: *Krishani Abeyskera*

**DIMENSIONS OF SELF-PERCEIVED EMPLOYABILITY IN FIRST YEAR IT STUDENTS (F028)**

*Amy Antonio and David Tuffley*

**USING ARDUINO TO TEACH PROGRAMMING TO FIRST-YEAR COMPUTER SCIENCE STUDENTS (F078)**

*Wee Lum Tan, Sven Venema and Ruben Gonzalez*

**CHALLENGES FOR A NEW GENERATION OF STEM STUDENTS (F033)**

*Krishani Abeyskera, Sharon Perkins Hall, Sadegh Davari and Amanda Smith Hackler*

**EXPLORING THE EDUCATIONAL POTENTIAL OF MINECRAFT: THE CASE OF 118 ELEMENTARY-SCHOOL STUDENTS (S034)**

*Thierry Karsenti and Julien Bugmann*

**DIGITAL STORY CREATION: ITS IMPACT TOWARDS ACADEMIC PERFORMANCE (S138)**

*Charito G. Ong*

11:00-11:30 Coffee Break

11:30-12:50 Session FSP 13.3

Peer- and Collaborative Learning

Room 3

Chair: *Maria João Silva*

**LEARNING GROUP FORMATION FOR MASSIVE OPEN ONLINE COURSES (MOOCS) (F108)**

*Sankalp Prabhakar and Osmar R. Zaiane*

**ICE: AN AUTOMATED TOOL FOR TEACHING ADVANCED C PROGRAMMING (F059)**

*Ruben Gonzalez (presented by Wee Lum Tan)*

**COLLABORATIVE PEER FEEDBACK (S122)**

*David A. Smith*

11:30-13:20 Session FSP 13.4

Sustainability and Environment

Room 4

Chair: *Roberto Araya*

**EFFECT OF TEMPERATURE ON CARBON DIOXIDE ABSORPTION USING SODIUM HYDROXIDE IN BIOGAS UPGRADING (F076)**

*Ireen Maile, Edison Muzenda and Charles Mbohwa*

**DESIGN CONSIDERATIONS FOR AN ENGINEERED LANDFILL (F104)**

*Musaïda Mercy Manyuchi, Charles Mbohwa and Edison Muzenda*

**ENHANCING BIOGAS PRODUCTION THROUGH CO-DIGESTION OF ANIMAL WASTE AND GRASS (F077)**

*Ireen Maile, Edison Muzenda and Charles Mbohwa*

**WASTE TO ENERGY - REVIEW OF WASTE MANAGEMENT ACTIVITIES AND CHALLENGES, PAPUA NEW GUINEA (S029)**

*Syed M S Wahid*

13:20 Best Paper Awards Ceremony and Closing Session

Room 3

**CLOSING SESSION**

*Pedro Isaias and Ana Hol*