

# Conference Program

## Melbourne, Australia

### Tuesday 6<sup>th</sup>, December 2016

**08:30-19:10 Welcome Desk**

**Room 09 (Building 80 - Level 11)**

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

**Room 06 (Building 80 - Level 11)**

**OPENING SESSION**

*Profs. Pedro Isaías and Elspeth McKay*

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

**Room 06 (Building 80 - Level 11)**

**RIDING THE INNOVATION WAVE, AUSTRALIAN ICT PRACTICE IN A GLOBAL CONTEXT**

*by Ms. Brenda Aynsley, OAM, Fellow ACS, Australia*

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

**11:30-12:45 Session FRP 6.1**

**Digital Services in e-Society**

**Room 06 (Building 80 - Level 11)**

**Chair: Ruth Wario**

**ECG IDENTIFICATION SYSTEM USING NEURAL NETWORK WITH GLOBAL AND LOCAL FEATURES (F063)**

*Kuo-Kun Tseng, Dachao Lee and Charles Chen*

**SMARTENING UP: ONGOING CHALLENGES FOR AUSTRALIA'S OUTBACK (F021)**

*Lucy Craddock*

**SYNTHETIC BIOLOGY: KNOWLEDGE ACCESSED BY EVERYONE (OPEN SOURCES) (R090)**

*Patricia Margarita Sánchez Reyes*

**11:30-13:00 Session FP 6.2**

**Curricular Evolution // Alternative Assessment Methods**

**Room 07 (Building 80 - Level 11)**

**Chair: Stephen Arnold**

**TOWARDS A FRAMEWORK TO IMPROVE THE QUALITY OF TEACHING AND LEARNING: CONSCIOUSNESS AND VALIDATION IN COMPUTER ENGINEERING SCIENCE, UCT (F083)**

*Marcos Lévano and Andrea Albormoz*

**MOOCS – THEORETICAL AND PRACTICAL ASPECTS: COMPARISON OF SELECTED RESEARCH RESULTS: POLAND, RUSSIA, UKRAINE, AND AUSTRALIA (F167)**

*Eugenia Smyrnova-Trybulska, Ewa Ogrodzka-Mazur, Anna Szafrńska-Gajdzica, Nataliia Morze, Rusudan Makhachashvili, Tatiana Noskova, Tatiana Pavlova, Olga Yakovleva, Tomayess Issa and Theodora Issa*

**EVALUATING THE DESIGN AND DEVELOPMENT OF AN ADAPTIVE E-TUTORIAL MODULE: A RASCH-MEASUREMENT APPROACH (F201)**

*Allaa Barefah and Elspeth McKay*

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

**14:30-15:30 Session FP 6.3**

**Semantic Web and XML // Software Requirements and Web Architectures**

**Room 07 (Building 80 - Level 11)**

**Chair: Katarina Ćurko**

**EXTRACTION OF GRAPH INFORMATION BASED ON IMAGE CONTENTS AND THE USE OF ONTOLOGY (F088)**

*Sarunya Kanjanawattana and Masaomi Kimura*

**APPLICABILITY OF DOMAIN-SPECIFIC APPLICATION FRAMEWORK FOR END-USER DEVELOPMENT (F074)**

*Takeshi Chusho*

**14:30-15:30 Session SRP 6.4**  
**Sustainability and Green IT // Sustainability and Education**  
**Room 06 (Building 80 - Level 11)**  
**Chair: Samuel Mann**

**GREEN IT MODEL FOR IT DEPARTMENTS IN GULF COOPERATION COUNCIL (GCC) ORGANISATIONS (S119)**  
*Abdulaziz Albahlal*  
**HOW DOES THE USE OF MOBILE DEVICES AFFECT TEACHERS' PERCEPTIONS ON MOBILE LEARNING? (S033)**  
*Dong-Joong Kim, Daesang Kim and Sang-Ho Choi*  
**CLOUD COMPUTING IN HIGHER EDUCATION SECTOR FOR SUSTAINABLE DEVELOPMENT (R118)**  
*Yuchao Duan*  
**EFFECTS OF A TECHNOLOGY-FRIENDLY EDUCATION PROGRAM ON PRE-SERVICE TEACHERS' PERCEPTIONS AND LEARNING STYLES (P122)**  
*Dong-Joong Kim and Sang-Ho Choi*

**15:30-16:30 Session KL2 – Keynote Presentation**  
**Room 06 (Building 80 - Level 11)**

**NON-DISCIPLINE GRADUATE SKILLS: REVIEW AND ASSESSMENT**  
*by Dr. Kathy Lynch, University of the Sunshine Coast, Australia*

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

**17:00-19:10 Session FSP 6.5**  
**Information Management // Other**  
**Room 06 (Building 80 - Level 11)**  
**Chair: Daihwan Min**

**APPLICATION OF BUSINESS INTELLIGENCE SYSTEM IN COMPANY RESTRUCTURING PROCESS: THE CASE OF CROATIA (F082)**  
*Iva Bakula, Katarina Ćurko, Mirjana Pejić Bach and Vesna Bosilj Vukšić*  
**METHOD TO IDENTIFY DEEP CASES BASED ON RELATIONSHIPS BETWEEN NOUNS, VERBS, AND PARTICLES (F077)**  
*Daisuke Ide and Masaomi Kimura*  
**LEVERAGING DATA ANALYSIS FOR DOMAIN EXPERTS: AN EMBEDDABLE FRAMEWORK FOR BASIC DATA SCIENCE TASKS (F080)**  
*Johannes-Y. Lohrer, Daniel Kaltenthaler and Peer Kröger*  
**AN E-LEARNING SYSTEM WITH MR FOR EXPERIMENTS INVOLVING CIRCUIT CONSTRUCTION TO CONTROL A ROBOT (S092)**  
*Atsushi Takemura*  
**RACING TO THE FUTURE: SECURITY IN THE GIGABIT RACE? (S053)**  
*Mark A. Gregory and Lucy Craddock*

**17:00-18:50 Session FSP 6.6**  
**Social Media in Education // Education in the Network Society**  
**Room 07 (Building 80 - Level 11)**  
**Chair: Mikko-jussi Laakso**

**DIFFERENCES BETWEEN PERCEIVED USEFULNESS OF SOCIAL MEDIA AND INSTITUTIONAL CHANNELS BY UNDERGRADUATE STUDENTS (F159)**  
*Leandro Sumida Garcia and Camila Mariane Costa Silva*  
**INTEGRATE WECHAT WITH MOODLE TO PROVIDE A MOBILE LEARNING ENVIRONMENT FOR STUDENTS (F089)**  
*Zhigao Li, Yibo Fan and Jianli Jiao*  
**SIMULATIONS FOR CRISIS COMMUNICATION: THE USE OF SOCIAL MEDIA (S183)**  
*Siyoung Chung*  
**SOCIAL NETWORKING FRAMEWORK FOR UNIVERSITIES IN SAUDI ARABIA (S144)**  
*Sulaiman Alqahtani*  
**USE OF COGNITIVE AND METACOGNITIVE STRATEGIES IN ONLINE SEARCH: AN EYE-TRACKING STUDY (P038)**  
*Mingming Zhou and Jing Ren*

## Wednesday 7<sup>th</sup>, December 2016

**08:30-15:45 Welcome Desk**  
**Room 09 (Building 80 - Level 11)**

**09:20-11:00 Session FSP 7.1**  
**Sustainability and Education**  
**Room 06 (Building 80 - Level 11)**  
**Chair: Reza Kiani Mavi**

**A RETHINK FOR COMPUTING EDUCATION FOR SUSTAINABILITY (F130)**  
*Samuel Mann*  
**TECHNICAL EDUCATION AS A TOOL FOR ENSURING SUSTAINABLE DEVELOPMENT: A CASE OF INDIA (F098)**  
*Gagan Deep Sharma, Raminder Singh Uppal and Mandeep Mahendru*  
**DESIGN THINKING: A METHODOLOGY TOWARDS SUSTAINABLE PROBLEM SOLVING IN HIGHER EDUCATION IN SOUTH AFRICA (S129)**  
*Keneilwe Munyai*  
**NEW ECOLOGICAL PARADIGM AND SUSTAINABILITY ATTITUDES WITH RESPECT TO A MULTI-CULTURAL EDUCATIONAL MILIEU IN CHINA (S086)**  
*Mona Wells and Lynda Petherick*

**09:10-11:00 Session FSP 7.2**  
**Curricular Evolution // International Higher Education**  
**Room 07 (Building 80 - Level 11)**  
**Chair: Deirdre Butler**

**EDUCATIONAL ROBOTS IN PRIMARY SCHOOL TEACHERS' AND STUDENTS' OPINION ABOUT STEM EDUCATION FOR YOUNG LEARNERS (F150)**  
*Eugenia Smyrnova-Trybulska, Natalia Morze, Piet Kommers, Wojciech Zuziak and Mariia Gladun*  
**TOWARDS THE SUCCESSFUL INTEGRATION OF DESIGN THINKING IN INDUSTRIAL DESIGN EDUCATION (F170)**  
*Omar Mubin, Mauricio Novoa and Abdullah Al Mahmud*  
**INTERNATIONAL STUDY TOURS: A KEY TO 21ST CENTURY ACADEMIC AND INDUSTRY EXCHANGES (F164)**  
*Ana Hol, Danielle Simiana, Gilbert Lieu, Ivan Ong, Josh Feder, Nimat Dawre and Wakil Almazi*  
**RETHINKING E-LEARNING MEDIA: WHAT HAPPENS WHEN STUDENT LIKE MEETS PROFESSOR ME? (S193)**  
*Stephen Arnold*

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

**11:30-12:30 Session KL1 – Keynote Presentation**  
**Room 06 (Building 80 - Level 11)**

**LEARNING ANALYTICS: PAST, PRESENT AND FUTURE**  
*Professor Pedro Isaías, University of Queensland, Brisbane, Australia*

**12:30-13:00 Doctoral Consortium**  
**Room 06 (Building 80 - Level 11)**  
**Chair: Pedro Isaías**

**A MODEL FOR AN INFORMATION SECURITY RISK MANAGEMENT (ISRM) FRAMEWORK FOR SAUDI ARABIAN ORGANISATIONS (D024)**  
*Naser Alshareef*

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

**14:15-15:30 Session FRP 7.3**  
**e-Business / e-Commerce**  
**Room 06 (Building 80 - Level 11)**  
**Chair: Cristine Gusmão**

**INVESTIGATING THE IDENTITY THEFT PREVENTION STRATEGIES IN M-COMMERCE (F073)**  
*Mahmood Hussain Shah, Javed Ahmed and Zahoor Ahmed Soomro*  
**ELECTRONIC INVOICE IN COSTA RICA: CHALLENGES FOR ITS IMPLEMENTATION (F105)**  
*Juan José Ramírez-Jiménez, Mario De La O-Selva and Roberto Cortés-Morales*  
**EXPLORING CONNECTIVISM IN THE CONTEXT OF ONLINE SOCIAL TRADING (R050)**  
*Endrit Kromidha*

**14:30-15:20 Posters Session**  
**Room 07 (Building 80 - Level 11)**  
**Chair: Pedro Isaias**

**A PRELIMINARY INVESTIGATION INTO THE INFORMATION SHARING BEHAVIOR OF SOCIAL MEDIA USERS AFTER A NATURAL DISASTER (P093)**

*Yukiko Maruyama*

**DEVELOPMENT OF A DIAGNOSTIC SYSTEM FOR INFORMATION ETHICS EDUCATION (P151)**

*Shingo Shiota, Kyohei Sakai and Keita Kobayashi*

**A PRACTICAL STUDY OF MATHEMATICS EDUCATION USING GAMIFICATION (P153)**

*Kyohei Sakai and Shingo Shiota*

**DEVELOPMENT OF TRAINING/SELF-RECOGNIZING TOOLS FOR DISABILITY STUDENTS USING A FACE EXPRESSION RECOGNITION SENSOR AND A SMART-WATCH (P156)**

*Taku Kawada, Akinobu Ando, Hiroataka Saito, Jun Uekida, Nobuyuki Nagai, Hisashi Takeshima and Darold Davis*

**DEMONSTRATING THE COLLATREX FRAMEWORK FOR COLLABORATIVE CONTEXT-AWARE MOBILE TRAINING AND EXPLORATION (P161)**

*Jean Botev*

**ANALYSIS OF USAGE TRENDS OF SOCIAL MEDIA AND SELF-ESTEEM BY THE ROSENBERG SCALE (P177)**

*Hiroko Kanoh*

**15:45 Social Event**

## Thursday 8<sup>th</sup>, December 2016

**08:30-13:10 Welcome Desk**  
**Room 09 (Building 80 - Level 11)**

**09:10-11:00 – Session FSP 8.1**  
**Sustainability and Marketing and Barding // Sustainability, value and business strategy // Sustainability and Social**  
**Room 06 (Building 80 - Level 11)**  
**Chair: Mona Cara Wells**

**EVALUATING ECO-INNOVATION OF OECD COUNTRIES WITH DATA ENVELOPMENT ANALYSIS (F133)**  
*Reza Kiani Mavi and Craig Standing*  
**REVEALING GREENWASHING: A CONSUMERS' PERSPECTIVE (F026)**  
*Anne Brouwer*  
**BENCHMARKING ANTHROPOGENIC HEAVY METALS EMISSIONS: AUSTRALIAN AND GLOBAL URBAN ENVIRONMENTAL HEALTH RISK BASED INDICATORS OF SUSTAINABILITY (F080)**  
*Nick Dejkovski*  
**CATEGORIZING 'OTHERS': THE SEGMENTATION OF OTHER ACTORS FOR 'FAITH IN OTHERS' EFFICACY (FIO) (S072)**  
*Chi Kwan Ng and Clare D'Souza*

**09:00-11:00 – Session FP 8.2**  
**Education as Professional Field**  
**Room 06 (Building 80 - Level 11)**  
**Chair: Elspeth McKay**

**SCALING A MODEL OF TEACHER PROFESSIONAL LEARNING – TO MOOC OR NOT TO MOOC? (F172)**  
*Deirdre Butler, Margaret Leahy, Michael Hallissy and Mark Brown*  
**A PRELIMINARY STUDY ON BUILDING AN E-EDUCATION PLATFORM FOR INDIAN SCHOOL-LEVEL CURRICULA (F116)**  
*Rajeev Kumar Kanth and Mikko-Jussi Laakso*  
**AUTOMATED ASSESSMENT IN MASSIVE OPEN ONLINE COURSES (F184)**  
*Dmitrii A. Ivaniushin, Dmitrii G. Shtennikov, Eugene A. Efimchick and Andrey V. Lyamin*  
**APPLICATION OF DIGITAL CYBERSECURITY APPROACHES TO UNIVERSITY MANAGEMENT – VFU SMART STUDENT (F176)**  
*Anna Nedyalkova, Teodora Bakardjieva and Krasimir Nedyalkov*

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

**11:30-13:00 Session FP 8.3**  
**Mobile Applications**  
**Room 06 (Building 80 - Level 11)**  
**Chair: Lucy Craddock**

**AN EVALUATION OF IPAD AS A LEARNING TOOL IN HIGHER EDUCATION WITHIN A RURAL CATCHMENT: A CASE STUDY AT A SOUTH AFRICAN UNIVERSITY (F041)**  
*Ruth Diko Wario, Bonface Ngari Ireri and Lizette De Wet*  
**CAR APP'S PERSUASIVE DESIGN PRINCIPLES AND BEHAVIOR CHANGE (F051)**  
*Chao Zhang, Lili Wan and Daihwan Min*  
**EVALUATING THE QUALITY OF EXPERIENCE OF A SYSTEM FOR ACCESSING EDUCATIONAL OBJECTS IN HEALTH (F070)**  
*Miguel Wanderley, Júlio Menezes Jr., Cristine Gusmão and Rodrigo Lins*

**11:30-12:50 Session FSRP 8.4**  
**Integrating Educational Technologies**  
**Room 07 (Building 80 - Level 11)**  
**Chair: Eugenia Smyrnova-trybulska**

**DEVELOPING A TECHNOLOGY ENHANCED CS0 COURSE FOR ENGINEERING STUDENTS (F121)**  
*Erno Lökkila, Erkki Kaila, Rolf Lindén, Mikko-Jussi Laakso and Erkki Sutinen*  
**TELLING THE STORY OF MINDRISING: MINECRAFT, MINDFULNESS AND MEANINGFUL LEARNING (S175)**  
*Deirdre Butler, Mark Brown and Gar Mac Críosta*  
**BLUE OCEAN STRATEGY FOR HIGHER EDUCATION (R154)**  
*Ricardo Bragança*  
**EXPLORING HOW DIGITAL MEDIA TECHNOLOGY CAN FOSTER SAUDI EFL STUDENTS' ENGLISH LANGUAGE LEARNING (R206)**  
*Abdulmohsin Altawil*

**13:00 Best Paper Awards Ceremony and Closing Session**  
**Room 06 (Building 80 - Level 11)**

**CLOSING SESSION**  
*Profs. Pedro Isaías and Elspeth McKay*