

# 14<sup>th</sup> MULTI CONFERENCE ON COMPUTER SCIENCE AND INFORMATION SYSTEMS

21 – 23 July 2020

14<sup>th</sup> International Conference on e-Learning

13<sup>th</sup> International Conference on ICT, Society and Human Beings

17<sup>th</sup> International Conference on Web Based Communities and Social Media

6<sup>th</sup> International Conference on Connected Smart Cities

## CONFERENCE PROGRAM

**IMPORTANT NOTICE:** listed times are in GMT+1, you can check your timezone at <https://greenwichmeantime.com/time-zone/gmt-plus-1/> (you can use the provided URL to insert your location and see your time in relation to GMT+1).

### Tuesday 21<sup>st</sup> July 2020

#### 09:00-9:15 Session O – Opening Session

*Profs. Pedro Isaias, Miguel Baptista Nunes and Guo Chao (Alex) Peng*

#### 09:15-10:15 Session KL1 – Keynote Presentation

**LET'S PUT LEARNING BACK INTO BLENDED LEARNING: A COLLECTIONIST FRAMEWORK**

*Professor Johannes Cronjé, Dean of Informatics and Design, Cape Peninsula University of Technology, South Africa*

#### 10:15-10:30 Break

#### 10:30-12:05 Session FSRP 21.1

##### Instructional Design Issues

*Chair: Mary Ann Barbour El Rassi*

**USE OF HYBRID CLASSROOM AND OPEN EDUCATIONAL RESOURCES: EXPERIENCE GAINED FROM A UNIVERSITY IN HONG KONG (F055)**

*Nikolina Dragicevic, Ioanna Pavlidou and Eric Tsui*

**RESPONDING TO COVID-19: RAPID ORGANISATIONAL CHANGE IN ONLINE CPD PRODUCTION. A CASE REPORT (F082)**

*Dirk Pilat and David Cameron*

**PERSONALIZED FEEDBACKS BASED ON LEARNING ANALYTICS TO ENHANCE THE LEARNING OF PROGRAMMING (S029)**

*Zahi Hodeib and Yvan Peter*

**ECOPOLYTECHNIC: A SUSTAINABLE AND FLEXIBLE E-LEARNING SYSTEM FOR AGILE SMART LEARNING SCENARIOS (R040)**

*Michele Angelaccio*

#### 10:30-11:50 Session FSP 21.2

##### Social Media

*Chair: Bertil P. Marques*

**VIRTUAL BRAND COMMUNITY INFLUENCE ON BRAND LOYALTY: CUSTOMER RELATIONSHIPS AND TRUST MEDIATORS (F027)**

*Joshua Doe*

**HOW DO FAKE NEWS PROPAGATORS EXPLOIT SOCIAL ALGORITHMS TO PROMOTE THEIR CONTENTS? (F045)**

*Ittipon Rassameeroj and Shyhtsun Felix Wu*

**TWITTER SENTIMENT ANALYSIS: FAN ENGAGEMENT IN ESPORTS MATCHES (S049)**

*Sarah Anne Yan and Peter Mawhorter*

#### 12:30 – 14:00 Break

**14:00-15:50 Session FSRP 21.3**

**Primary and Secondary Education // Vocational Training // e-Learning Models**

**Chair: Bertil P. Marques**

**DIGITAL COMPETENCES FOR EDUCATORS IN THE ITALIAN SECONDARY SCHOOL: A COMPARISON BETWEEN DIGICOMPEDU REFERENCE FRAMEWORK AND THE PP&S PROJECT EXPERIENCE (F041)**

*Cecilia Fissore, Francesco Floris, Marina Marchisio, Sergio Rabellino and Matteo Sacchet*

**GENDER DIFFERENCES IN ATTITUDES TOWARDS OBOW EXAMS: THE CASE OF A DEVELOPING COUNTRY (F093)**

*Mary Ann B. El Rassi*

**E-LEARNING COURSE IN SMART TEXTILES (S071)**

*Ion Razvan Radulescu, Luis Almeida, Benny Malengier, Zoran Stjepanovic, Mirela Blaga and Petra Dufkova*

**TESTING AND USING "TISB-ALBANIA" (TRANSPARENT INTERACTIVE SCREEN-BOARD) DURING COVID19 (R062)**

*Romeo Teneqexhi and Loreta Kuneshka*

**DESIGN OF A SERIOUS GAME FOR THE USE OF FOREIGN LANGUAGES: TOWARDS A RELEVANT DIDACTIC SYSTEM (R079)**

*Lizandro Becerra and Georges Antoniadis*

**14:00-16:00 Session FSP 21.4**

**Work environment/Work place**

**Chair: Norshidah Mohamed**

**YOU JUST REMINDED ME – I'M HUMAN!: VIEWING OR INTERACTING WITH ROBOTS INCREASES HUMAN CONFORMITY TO OTHER HUMANS (F054)**

*Julian Welsh, Marlena Fraune and Yanfen You*

**EMPLOYERS' MIXED SIGNALS TO WOMEN IN IT: UNCOVERING HOW GENDER EQUALITY IDEALS ARE CHALLENGED BY ORGANIZATIONAL CONTEXT (F055)**

*Hilde G. Corneliussen and Gilda Seddighi*

**TIME ESTIMATION IMPROVEMENT IN AGILE DEVELOPMENT (F067)**

*Willem van der Feltz, Niels van der Pas and Mark van der Pas*

**COVID 19: WORKING FROM HOME: TWITTER REVEALS WHY WE'RE EMBRACING IT (S040)**

*Fiona Carroll, Mohamed Mostafa and Simon Thorne*

**THE EFFECT OF THREE DIFFERENT POSTURE COMPUTER WORKSTATION ON WORKING PERFORMANCE (P017)**

*Takeshi Sato, Mizuki Nakajima Macky Kato, Ryota Murano and Hiroshi Morikawa*

**16:00-16:15 Break**

**16:15-18:45 FP 21.5**

**Data and Software Applications in Smart Cities // Real-time decision analysis/support systems for monitoring and managing smart cities**

**Chair: Miguel Baptista Nunes**

**WHERE TO GO? SMART GUIDANCE BASED ON IOT SENSOR-DATA (F048)**

*Robin Effing, Robert J. Brouwer, Asen Iliev, Thomas Teunissen and Fons Wijnhoven*

**EVIDENCE-DRIVEN POLICY MAKING USING HETEROGENEOUS SOURCES OF DATA - THE CASE OF A CONTROL PARKING SYSTEM (F021)**

*Anastasios Papazoglou Chalikias, Ioannis Tsampoulatidis, Filareti Tsalakanidou, Spiros Nikolopoulos, Ioannis (Yiannis) Kompatsiaris, Konstantinos Doudouliakis, Petros Papafilis and Georgios Papastergios*

**MEXICO CITY'S AIRBNB LISTING PRICE ANALYSIS USING REGRESSION (F044)**

*Daniela A. Gomez-Cravioto, Ramon E. Diaz-Ramos, Virginia I. Contreras-Miranda and Francisco J. Cantu-Ortiz*

**16:15-17:35 FSRP 21.6**

**Actions for reaching the Good Information Society**

**Chair: Fiona Carroll**

**COMPARATIVE ANALYSIS OF NATIONAL OPEN DATA PORTALS OR WHETHER YOUR PORTAL IS READY TO BRING BENEFITS FROM OPEN DATA (F045)**

*Anastasija Nikiforova*

**COUNTER TERRORISM FINANCE BY DETECTING MONEY LAUNDERING HIDDEN NETWORKS USING UNSUPERVISED MACHINE LEARNING ALGORITHM (F050)**

*Amr Ehab Muhammed Shokry, Mohammed Abo Rizka and Nevine Makram Labib*

**INDIVIDUAL'S INTENTION TO SUBSCRIBE TO FREEMIUM MUSIC STREAMING SERVICES: A CONCEPTUAL FRAMEWORK (S072)**

*Norshidah Mohamed and Hanif Haghshenas*

**Wednesday 22<sup>nd</sup> July 2020**

**08:55-10:15 Session FSP 22.1**

**Higher and Further Education**

**Chair: Matteo Sacchet**

**DELIVERING AN ONLINE COURSE ON 'HEALTH EMERGENCY FROM SARS-COV-2, THE NOVEL CORONAVIRUS: PREPARATION AND CONTRAST' FOR HEALTH PROFESSIONS STUDENTS AT ITALIAN UNIVERSITIES (F058)**

*Giovanni Galeoto, Anna Berardi, Marco Tofani, Luisa Saiani, Alvisa Palese and Donatella Valente*

**THE EFFECT OF GENDER ON UNIVERSITY TEACHERS' ICT USE (F025)**

*Manica Danko, Mitja Dečman, Damijana Keržič and Vida Zorko*

**DESCRIPTION OF METHOD USED BY SAPIENZA UNIVERSITY IN ROME TO DELIVER REHABILITATION PROGRAM E-COURSES TO STUDENTS FOLLOWING THE COVID-19 EMERGENCY (S061)**

*Anna Berardi, Marco Tofani, Giovanni Galeoto, Maria Auxiliadora Marquez and Donatella Valente*

**08:45-10:15 Session FP 22.2**

**Globalization and ICT**

**Chair: Anastasija Nikiforova**

**MANAGING MILLENNIALS AS OUTSOURCED INFORMATION TECHNOLOGY PROFESSIONALS: A SYSTEMATIC REVIEW (F028)**

*Tiago Jacob Fernandes França, Henrique São Mamede and Vítor Duarte dos Santos*

**ESTIMATION OF SOCIAL CAPITAL BASED ON USER BEHAVIOR INFORMATION ON REGIONAL ELECTRONIC COUPON (F065)**

*Toshiomi Moriki, Hiroki Satoh, Hideyuki Maki and Norihisa Komoda*

**CREATION OF A PUBLICLY ACCESSIBLE RESOURCE FOR INCREASING THE VOLUME OF FREELY DISTRIBUTED MEDICAL DATASETS (F061)**

*Artyom Lobantsev, Artyom Beresnev, Mark Tkachenko, Olga Alekseeva, Natalia Gusarova, Aleksandra Vatian and Anatoly Shalyto*

**10:15-10:30 Break**

**10:30-12:20 Session FSP 22.3**

**Higher and Further Education // e-Learning Models**

**Chair: Nello Scarabottolo**

**DEVELOPMENT OF A MEASUREMENT TOOL TO EVALUATE THE LEARNING EXPERIENCE IN AN E-LEARNING SYSTEM (F020)**

*Yassine Safsouf, Khalifa Mansouri and Franck Poirier*

**USING SOCIAL MEDIA FOR PEER INTERACTION IN HIGHER EDUCATION: STUDENTS' PERCEPTION OF USING FACEBOOK TO SUPPORT PEER LEARNING (F073)**

*Marie Claire Ukwishaka and Naghmeh Aghaee*

**SHORT-TERM LEARNERS' MOTIVATION MODELING IN WEB BASED EDUCATION SYSTEM (F051)**

*Shahzad Shabbir, Muhammad Adnan Ayub, Farman Ali Khan and Jeffrey Davis*

**DESCRIPTION OF THE METHOD USED BY TOR VERGATA UNIVERSITY OF ROME FOR THE ELECTRONIC FINAL EXAM OF THE DEGREE COURSE IN PHYSIOTHERAPY (S052)**

*Annamaria Servadio, Anna Berardi, Marco Tramontano, Marco Tofani, Rosaria Alvaro, Pasquale Farsetti and Giovanni Galeoto*

**10:30-11:35 Session FSRP 22.4**

**User-Centric Smart Cities // Key areas of Smart Services**

**Chair: Miguel Baptista Nunes**

**THE ADVENT OF SMART CITIES: STATUS QUO AND FUTURE RESEARCH DIRECTIONS (F050)**

*Yusuf Bozkurt, Reiner Braun, Alexander Rossmann and Dieter Hertweck*

**THE SMART CITY AS A SOCIAL POLICY ACTOR (S037)**

*Diogo Miguel Mendes Correia and José Eduardo Silva Abreu Lopes Feio*

**HUMAN-CENTRIC TECHNOLOGY FOR URBAN PLANNING (R052)**

*Vaijayanthi Iyengar and Paul Chavez*

**12:30 – 13:50 Break**

**13:50-16:00 Session FSP 22.5**

**Distance Learning**

**Chair: Dirk Pilat**

**ANALYSIS ITEMS TO ASSESS THE QUALITY OF OPEN ONLINE COURSES FOR HIGHER EDUCATION (F035)**

*Marina Marchisio and Matteo Sacchet*

**ONLINE TUTORING THROUGH AN INTEGRATED PLATFORM TO SUPPORT LEARNING MATHEMATICS AT LOWER SECONDARY SCHOOL (F031)**

*Cecilia Fissore, Marina Marchisio and Sergio Rabellino*

**ONLINE WRITTEN EXAMS DURING COVID-19 CRISIS (F095)**

*Goffredo Haus, Yuri Benvenuto Pasquinelli, Daniela Scaccia and Nello Scarabottolo*

**REMOTE TEACHING FOR DEAF PUPILS DURING THE COVID-19 EMERGENCY (S069)**

*Federica Baroni and Marco Lazzari*

**STUDENT'S SOCIAL VULNERABILITY IN DISTANCE LEARNING IN COVID-19 TIMES (S106)**

*Bertil P. Marques, Rui Marques and Rosa Reis*

**14:00-16:00 FDSP 22.6**

**Desirable goals and ICT // Life role and ICT**

**Chair: Anastasija Nikiforova**

**A COLLECTIVE AWARENESS PLATFORM FOR MISSING CHILDREN INVESTIGATION AND RESCUE (F018)**

*Ariadni Michalitsi-Psarrou, Christos Ntanos and John Psarras*

**INFORMATION SYSTEMS FOR ENVIRONMENTAL SUSTAINABILITY. HOW CAN COMPANIES CREATE A SUSTAINABLE AQUACULTURE INDUSTRY? (D030)**

*Carolina Costabile*

**DESIGN POINT. AN INTEGRATED E-LEARNING & INDUSTRY 4.0 FASHION PLATFORM FROM ITALY TO ZAMBIA (S037)**

*Dalia Gallico*

**DIGITAL PLATFORMS, AFFORDANCE, AND PUBLIC GOVERNABILITY (S058)**

*Leonid Smorgunov*

**ESTIMATING THE MONETARY BENEFITS OF TELEREHABILITATION IN THE COUNTRYSIDE – CASE OF INTRODUCTION OF TELE-HOMECARE (S048)**

*Päivi Kekkonen, Arto Reiman, Pirjo Lappalainen, Marika Tuiskunen and Kirsi Jokinen*

**16:00-16:15 Break**

**16:15-17:35 FSP 22.7**

**Social Media**

**Chair: Bertil P. Marques**

**USING THE NETWORKED KNOWLEDGE ACTIVITIES FRAMEWORK TO EXAMINE LEARNING ON SOCIAL NETWORKING SITES (F051)**

*Vanessa P. Dennen, Kari Word, Dawn Adolfson, Victor Arechavaleta, Dan He, Chia-Wei Hsu, Jaesung Hur, Daeun Jung, Heather Kent, Annemarie Russell and Korinna Toth*

**INFLUENCING FOLLOWERSHIP: UNDERSTANDING THE PERSPECTIVE OF THOSE LEADING ACTIVE DISCUSSIONS ON QUORA (F038)**

*Martin C. Nwadiugwu*

**A HOLISTIC SOCIAL COMMERCE FRAMEWORK FOR SAUDI ARABIA (S016)**

*Mohammed Aljaafari*

**Thursday 23<sup>rd</sup> July 2020**

**09:25-10:15 Session FSP 23.1**

**ICT skills education**

**Chair: Emre Erturk**

**DIGITAL LITERACY ASSESSMENT OF UNDERGRADUATE STUDENTS FROM PHYSICAL EDUCATION PROGRAM OF THAILAND NATIONAL SPORTS UNIVERSITY (F067)**

*Narumon Rodniam*

**TEACHING PROGRAMMING SKILLS TO GIRLS (S076)**

*Nataša Hoić-Božić, Martina Holenko Dlab, Ivona Franković and Marina Ivašić-Kos*

**9:25-10:15 Session FSP 23.2**

**Group Processes and Self-Organization // Collaborative Technologies**

**Chair: Ittipon Rassameeroj**

**EMOTION ANALYSIS USING SELF-TRAINING ON MALAYSIAN CODE-MIXED TWITTER DATA (F048)**

*Kathleen Swee Neo Tan, Tong Ming Lim and Yee Mei Lim*

**INTERACTIVE POTENTIAL OF NEWS NARRATIVES IN COMMUNITIES FORMED AROUND NEWS MEDIA (S039)**

*Artem Zakharchenko*

**10:15-10:30 Break**

**10:30-12:05 Session FSRP 23.3**

**Evaluation of e-Learning Technologies // Virtual Learning Environments (VLEs)**

**Chair: Miguel Baptista Nunes**

**HYBRID RECOMMENDATION APPROACH BASED ON A VOTING SYSTEM: EXPERIMENTATION IN AN EDUCATIONAL CONTEXT (F032)**

*Mohammed Baidada, Khalifa Mansouri and Franck Poirier*

**USING FORMAL CONCEPT ANALYSIS TO EXPLORE HIDDEN KNOWLEDGE IN THE ASSESSMENT OF A MATH COURSE (F100)**

*Francisco Pérez-Gámez, Manuel Ojeda-Hernández, Ángel Mora Bonilla, Domingo López-Rodríguez and Nicolas Madrid*

**COMPUTER SIMULATION WITH ARGUMENTATION SCAFFOLDING FOR ELEMENTARY STUDENTS' COLLABORATIVE SCIENTIFIC EXPLANATION (S103)**

*Fan-Jun Yang and Chien-Yuan Su*

**THE EXPANDING ROLE OF IMMERSIVE MEDIA IN EDUCATION (R064)**

*Emre Erturk and Gabrielle-Bakker Reynold*

**10:30-12:40 Session FSP 23.4**

**Life environment and ICT // Other**

**Chair: Leonid Smorgunov**

**DESIGNING FOR TRANSITIONS IN RURAL TRANSPORT (F074)**

*Amela Karahasanović, Alma Leora Culén, Jan Håvard Skjetne and Geir Hasle*

**ICT FOR DEVELOPMENT, EMPOWERMENT, OR EMANCIPATION? A REFLECTION ON TERMINOLOGY BASED ON CASE STUDIES IN UNDERSERVED COMMUNITIES OF CAPE TOWN (F015)**

*Maria Rosa Lorini and Wallace Chigona*

**ICTS USAGE AMONG RURAL COMMUNITIES IN THE INFORMATION AGE: A CASE STUDY OF SMALL SCALE FARMERS IN EASTERN CAPE PROVINCE SOUTH AFRICA (F016)**

*Agyei Fosu and Darelle van Greunen*

**ADOPTION OF AI IN AGRICULTURE: THE GAME-CHANGER FOR INDIAN FARMERS (S047)**

*Tapan Kumar and Nupur Prakash*

**GAMIFICATION AND INTERDISCIPLINARY SCIENTIFIC RESEARCH: SCIENTIFIC TEXT MINING (S024)**

*Olga Kononova, Dmitry Prokudin, and Angelina Timofeeva*

**12:40 Best Paper Awards Ceremony and Closing Session**

*Profs. Pedro Isaias, Miguel Baptista Nunes and Guo Chao (Alex) Peng*