

**Final Program of the MCCSIS 2019**  
**Multi Conference on Computer Science and Information Systems**

**Conference Sessions:**

**ICT, Society and Human Beings 2019**

**Connected Smart Cities 2019**

**Web Based Communities and Social Media 2019**

**Wednesday, 17<sup>th</sup> July 2019**

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

**09:45-10:00 Session O – Opening Session**  
**(Room: Auditório Vitor Santos)**

*Profs. Piet Kommers and Pedro Isaías*

**10:00-11:00 Session KL1 – Keynote Presentation**  
**(Room: Auditório Vitor Santos)**

**HOW TO USE E-LEARNING FOR TESTING AND ASSESSING LARGE CLASSES**

*Prof. Jaime Villate, Faculty of Engineering, University of Porto, Portugal*

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

**11:30-12:50 Session FSP 17.1**  
**ICT and effects on human // Desirable goals and ICT**  
**(Room: Sala Aula C219)**

*Chair: Piet Kommers*

**AVATAR 1, MEDIA AND SOCIO-TECHNOLOGICAL IMAGINARIES: IMPLICATIONS FOR HCI RESEARCH (F073)**

*Jorun Børsting, Alma Leora Culén and William Odom*

**A FITNESS BIKE MAINTENANCE TRAINING SYSTEM WITH THREE-DIMENSIONAL COMPUTER GRAPHICS (F093)**

*Takayuki Fujiwara, Shintaro Tsuchiya, Norihisa Komoda and Toru Fujiwara*

**ICT4D & THE SUSTAINABLE DEVELOPMENT GOALS (S044)**

*Franz Ferdinand Rothe*

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

**14:30-15:30 Session KL2 – Keynote Presentation**  
**(Room: Auditório Vitor Santos)**

**SMART AND SUSTAINABLE LIVING COLAB: A ROADMAP TO ACCELERATE URBAN SUSTAINABILITY**

*Prof. Frederico Custódio, Director of the Intelligence and Explorative Research Group at CEiiA, Portugal*

**14:30-16:20 Session FSP 17.2**  
**Social Media, Trust, Reputation and Public Opinion**  
(Room: Sala Aula C219)  
*Chair: Sandra Barnett*

**THE EFFECTS OF COLLECTIVISM AND SOCIAL NETWORK SELF-CONGRUITY ON ENGAGEMENT (F021)**  
*Sara Santos and Pedro Espírito Santo*  
**COMPLAINT HANDLING THROUGH SOCIAL MEDIA: PERCEIVED JUSTICE AND CUSTOMER SATISFACTION (F038)**  
*Made Dwita Juliarta, Achmad Nizar Hidayanto, Ave Adriana Pinem and Putu Wuri Handayani*  
**SPONSORSHIP CONGRUITY AND ATTITUDE TOWARDS ADVERTISING IN MUSIC FESTIVALS: THE ROLE OF TRUST AND SOCIAL MEDIA ENGAGEMENT (F024)**  
*Pedro Manuel do Espírito Santo and Sara Santos*  
**EXPLORING THE ROLE OF CUSTOMER REVIEWS IN DRIVING BUSINESS GROWTH (S052)**  
*Rdouan Faizi and Sanaa El Fkihi*

**15:40-16:30 Session FSP 17.3**  
**Life environment and ICT**  
(Room: Auditório Vitor Santos)  
*Chair Amal Dabbous*

**E-BUSINESS ADOPTION BY NON-PROFIT CULTURAL INSTITUTIONS (F028)**  
*Gabriel Antão and Pedro Isaías*  
**WORKING IN THE DIGITAL AGE: MERGING A STATUS QUO BIAS PERSPECTIVE AND REFLECTIVE PRACTICE (S104)**  
*Frederike Marie Oschinsky, Hans Christian Klein and Bjoern Niehaves*

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

**17:00-19:05 Session FSRP 17.4**  
**Globalization and ICT**  
(Room: Auditório Vitor Santos)  
*Chair: Piet Kommers*

**TECHNOLOGY EXPOSURE IN LARGE PORTUGUESE CATHOLIC FAMILIES (F090)**  
*Adriana José de Oliveira and Luciana Oliveira*  
**FACTORS AFFECTING THE SUSTAINED USE OF CHATBOTS: AN ORGANIZATIONAL PERSPECTIVE (F018)**  
*Karine Aoun Barakat and Amal Dabbous*  
**FROM NICHE TO MAINSTREAM TRANSITIONS: DIGITAL SECOND-HAND MARKETS FOR MILLENNIALS (F103)**  
*Swati Srivastava and Alma Leora Culén*  
**A METHODOLOGY FOR IMPROVING NEET YOUTH EMPLOYMENT IN THE ICT LABOUR MARKET (S085)**  
*Luciana Oliveira, Anabela Mesquita and Adriana José de Oliveira*  
**ADOPTION OF MOBILE BANKING (R102)**  
*Golan Carmi and Nethanel Jay Drezner*

**17:00-18:50 Session FSP 17.5**  
**IoT technologies bridging the physical and virtual worlds**  
(Room: Sala de Reuniões)  
*Chair: Lasse Berntzen*

**MOG - A SMART MOBILE SYSTEM FOR INTERACTIVE MUSEUM VISITS (F042)**  
*Bruno Coitos, Carlos Serrão and Nuno Garrido*  
**DESIGNING A NOVEL SMART HOME MONITORING SYSTEM WITH THE INTEGRATION OF BIM AND WSN (F073)**  
*Mustafa Corekci, Ozgun Pinarer and Sylvie Servigne*  
**COMPARISON OF IOT DEVICES ARCHITECTURE IN HOME NETWORK (F026)**  
*Takashi Murakami, Keiichi Teramoto, Ritsuko Kanazawa, Ryo Hasegawa, Tetsushi Matsuda, Kanji Mizuno, Dai Ando, Yasuo Sugawara, Yoko Masuda, Yudai Kawasaki, Yoichi Masuda, Moe Hamamoto, Hiroshi Sugimura and Masao Isshiki*  
**A PROPOSED TECHNOLOGY SOLUTION FOR PREVENTING MARINE LITTERING BASED ON UAVS AND IOT CLOUD-BASED DATA ANALYTICS (S061)**  
*George Stengos, Stavros T. Ponis, George Plakas and Athanasios Yamas*

**19:00 Welcome Cocktail**

**Thursday, 18<sup>th</sup> July 2019**

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

**09:10-11:00 Session FSP 18.1**

**Perspectives on ICT // Desirable goals and ICT**

**(Room: Sala Aula C220)**

**Chair: Amal Dabbous**

**CRGOURMETCOFFEE.COM: USING E-COMMERCE TO MITIGATE THE COFFEE PARADOX IN COSTA RICA (F068)**

*Francisco J. Mata and Irene Hernández Ruiz*

**INCLUSION THROUGH DIGITAL ARTS: CREATING A COMMUNITY OF PRACTICE (F101)**

*Ana Barata, Paula Escudeiro, Valérie Duarte and Jadir Lino*

**EMPIRICAL INVESTIGATION OF FACTORS THAT IMPACT E-GOVERNMENT ADOPTION IN NIGERIA (F070)**

*Joshua Chukwu, Marc Conrad and Tess Crosbie*

**A MOBILE APP TO EXPLORE CULTURAL AND HISTORICAL ASSOCIATIONS BETWEEN EUROPE AND THE ARAB AND THE ISLAMIC WORLDS (S063)**

*Ahmed Dahroug, Mohamed Aborizka, Martín López-Nores and José Juan Pazos-Arias*

**09:10-11:00 Session FSP 18.2**

**Social Media**

**(Room: Sala Aula C219)**

**Chair: Nazmiye Gizem Bacaksizlar**

**ASSESSING THE RELATIONSHIP BETWEEN INFORMATION TRANSPARENCY THROUGH SOCIAL MEDIA DISCLOSURE AND FIRM VALUE (F015)**

*Abdalmuttaleb M. A. Musleh Al-Sartawi*

**DIGITAL ME IN A VIRTUAL WORLD: IDENTITY CONSTRUCTION ON LINKEDIN BY AOTEAROA/NEW ZEALAND ENTREPRENEURIAL PROFESSIONALS (F019)**

*Sandra Jane Barnett*

**EXTREMIST TEXT DETECTION IN SOCIAL WEB (F035)**

*Dmitry Devyatkin, Ivan Smirnov, Fyodor Solovyev, Margarita Suvorova and Andrey Chepovski*

**THE IMPACT OF HOMOPHILY AND HERDING ON DECISION CONFIDENCE IN SOCIAL COMMERCE (S047)**

*Mariam Munawar, Khaled Hassanein and Milena Head*

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

**11:30-13:00 Session FP 18.3**

**ICT and effects on humans // Trust – security – privacy**

**(Room: Sala Aula C220)**

**Chair: Ana Barata**

**THE INFLUENCE OF MEDIUM CREDIBILITY TOWARDS INFORMATION ADOPTION IN INDONESIA STOCK INVESTMENT VIRTUAL COMMUNITIES (F098)**

*Hardyin Alexander Hutapea, Achmad Nizar Hidayanto, Fatimah Azzahro and Widjanto Satyo Nugroho*

**DEFYING THE CERTIFICATION DIPLOMA FORGERY WITH BLOCKCHAIN PLATFORM: A PROPOSED MODEL (F099)**

*Meyliana, Yakob Utama Chandra, Cadelina Cassandra, Surjandy, Henry Antonius Eka Widjaja, Erick Fernando, Harjanto Prabowo, and Charles Joseph*

**EDUCATION ON DIGITAL FORENSICS FOR WORKING PEOPLE AND GRADUATE STUDENTS IN JAPAN (F109)**

*Ryoichi Sasaki*

**11:30-13:00 Session FP 18.4**

**Transportation**

**(Room: Sala de Aula C219)**

**Chair: Lasse Berntzen**

**THE CHALLENGE OF SMART MOBILITY INTEGRATION IN THE EVOLVING SMART CITY CONTEXT; THE PARADIGM OF HERAKLION (F031)**

*Efthimios Bakogiannis, Maria Siti, Stefanos Tsigdinos, Georgia Christodouloupoulou and Christos Karolemeas*

**A MOBILE E-TICKET FRAMEWORK FOR BUS COMMUTERS: A MAURITIAN CASE STUDY (F032)**

*Darshini Gopaul, Sandhya Armoogum and Geerish Suddul*

**PERFORMANCE EVALUATION OF AN ADAPTABLE IN VANETS-BASED INTERSECTION TRAFFIC CONTROL (F037)**

*Hadeel A. Tabaza, Iman Saeed and Mourad Elhadef*

13:00 – 14:30 Lunch Break

14:30-15:25 Session FRP 18.5

Motivation // Wellbeing and health

(Room: Sala de Atos)

Chair: *Francisco J. Mata*

**THE ANALYSIS OF USER'S INTENTION IN USING MOBILE PAYMENT: A CASE OF YAP! (F069)**

*I Gede Adi Surya Atmajaya, Putu Wuri Handayani, Ave Adriana Pinem and Fatimah Azzahro*

**DIGITAL TRANSFORMATION IN ORGANIZATIONS: THE IMPACT ON WORKING LIFE QUALITY AND NEW RISK FACTORS (R120)**

*Emma Pietrafesa, Rosina Bentivenga, Sara Stabile and Sergio Iavicoli*

**WELLNESS IN YOUR POCKET: UPDATE YOUR HEALTH (P079)**

*Susana Orrego, Karine Posada, Ana M. Ortiz and María M. Yepes*

14:20-15:30 Session FSP 18.6

Smart City as an Integrated Ecosystem // Other

(Room: Sala de Reuniões)

Chair: *Sandhya Armoogum*

**INTEGRATED METHODOLOGICAL FRAMEWORK FOR SMART CITY DEVELOPMENT (F067)**

*Zineb Korachi and Bouchaib Bounabat*

**SMART CROSSWALKS: A SAFE ALERT SYSTEM THAT MINIMIZES THE CONFRONTATION BETWEEN VEHICLES AND PEDESTRIANS (S052)**

*João Branquinho, Carlos Senna and André Zúquete*

**HOW ORDINARY CITY SHIFT TO SMART CITY? A CASE STUDY "CITIZEN-CENTERED" (S025)**

*Hosni Seffih, Myriam Lamolle, Aurélie Pradelles, Ayoub Chouchou and Christian Fluhr*

15:45 – Conference Tour and Dinner

## Friday, 19<sup>th</sup> July 2019

08:15-13:00 Welcome Desk

09:45-11:00 Session FP 19.1

Life environment and ICT

(Room: Auditório C202)

Chair: *Emma Pietrafesa*

**LACK OF POPULARITY IN AUGMENTED AND VIRTUAL REALITY APPLICATIONS FROM THE PERSPECTIVE OF USERS, POTENTIAL USERS AND NON-USERS (F064)**

*Guilherme Daquir and Fábio Campos*

**SOCIOCULTURAL INFORMATION URBAN SPACE CONSTRUCTION (F040)**

*Olga Kononova, Dmitry Prokudin, Vitalina Karachay, and Daria Pilysova*

**THE EFFECTS OF PERSONAL TRAITS AND GAME FACTORS ON IMMORAL GAME BEHAVIOR: FOCUSED ON <LEAGUE OF LEGENDS> (F036)**

*Sungje Lee, Jeonyoung Kong, Meiyong Piao and Euijun Jeong*

09:05-11:00 Session FSRP 19.2

New Business Concerns in Smart Cities // Greenness and Sustainability of Smart Cities

(Room: Sala de Reuniões)

Chair: *Ozgun Pinarer*

**THE PRACTICAL SIDE OF IOT IMPLEMENTATION IN SMART CITIES (R076)**

*Artyom Kravchenko*

**HOW DO SMART BUILDING PROJECTS DEFINE AND DELIVER VALUE? A CLASSIFICATION OF BUSINESS MODELLING CHARACTERISTICS TO SUPPORT DESIGN AND DEVELOPMENT (F083)**

*Adriano Tanda and Alberto De Marco*

**WHERE DOES TECHNOLOGY FIT IN THE GEOSPATIAL DESIGN AND PLANNING PROFESSIONS? (F091)**

*Carlos J. L. Balsas*

**BLOCKCHAIN FOR IMPROVED SAFETY OF SMART BUILDINGS (S054)**

*Salam Abdallah, Nishara Nizamuddin and Ashraf Khalil*

**MULTI-LAYER AGGREGATION IN SMART GRIDS A BUSINESS MODEL APPROACH (S079)**

*Lasse Berntzen, Thomas Brekke and Marius Rohde Johannessen*

11:00-11:30 Coffee Break

11:30-12:50 Session FSP 19.3

Actions for reaching the Good Information Society

(Room: Auditório C202)

Chair: *Piet Kommers*

**PREDICTIVE SUCCESS FACTORS IN SCHOOL PERFORMANCE: AN ANALYSIS OF THE LARGE-SCALE ASSESSMENT IN BRAZIL (F080)**

*Ivonaldo Vicente da Silva, Márcia Terra da Silva and Saturnina Alves da Silva Martins*

**A PERCEPTIONAL STUDY ON THE ROLE OF DEVELOPMENT AGENTS AND GLOBAL LEADERS IN LEVERAGING TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT (F017)**

*Luis de Castro and Vitor dos Santos*

**EVOLUTION OF THE CONCEPT OF GOVERNABILITY IN THE CONTEXT OF DIGITALIZATION (S107)**

*Leonid V. Smorgunov, Kirill A. Neverov and Konstantin S. Kondratenko*

11:30-12:50 Session FSP 19.4

Social Media, Trust, Reputation and Public Opinion

(Room: Sala de Reuniões)

Chair: *Margarita Suvorova*

**DISCOVERY OF CUSTOMER SATISFACTION DIMENSION FROM TWEETS USING LATENT DIRICHLET ALLOCATION (F050)**

*Iqbal Hadiyan, Achmad Nizar Hidayanto and Satrio Baskoro Yudhoatmojo*

**FACT-CHECKING & SOCIAL MEDIA SHARING BEHAVIOR AMONG UAE YOUTH (F058)**

*Ashraf Khalil, Salam Abdallah and Kundan Noor Sheikh*

**ANGER IN PROTEST NETWORKS ON TWITTER (S036)**

*Nazmiye Gizem Bacaksizlar, Samira Shaikh and Mirsad Hadzikadic*

12:55 Best Paper Awards Ceremony and Closing Session

(Room: Sala de Reuniões)

*Prof. Piet Kommers*