

Preliminary Program of the MCCSIS 2024
Multi Conference on Computer Science and Information Systems

Conference Sessions:
e-Learning and Digital Learning 2024
ICT, Society and Human Beings 2024
e-Health 2024
Sustainability, Technology and Education 2024
Game and Entertainment Technologies 2024
Interfaces and Human Computer Interaction 2024
Computer Graphics, Visualization, Computer Vision and Image Processing 2024
Connected Smart Cities 2024
Big Data Analytics, Data Mining and Computational Intelligence 2024
Digital Transformation and Innovation Management 2024

Friday 12th July 2024

16:00 – 17:00 Welcome Desk – Room: Venus - only open for check-in and requests for information.

Saturday 13th July 2024

08:00-19:20 Welcome Desk – Room: Venus (closes for lunch 13:00 – 14:20)

09:00 – 09:15 Session O – Opening Session

Room: Panorama

Profs. Pedro Isaias and Paula Miranda

09:25-10:55 Session 13.1

e-Learning Pedagogical Strategies // e-Learning Models

Room: Panorama

USING AN ESCAPE ROOM: GAME TO EXPLORE THE RELATIONSHIPS BETWEEN GAMEPLAY SELF-EFFICACY, EXPERIENTIAL VALUE AND LEARNING PROGRESS IN A PERFORMING ARTS COURSE (ELDL - F047)

Jon-Chao Hong, Yi-An Chien and Chih-Hsuan Ho

WELCOME: TURN ON YOUR CAMERA, YOU HAVE A LEAD ROLE (ELDL - F061)

Eduardo Hamuy, Ricardo Abarca, Rolando Cori and José Garrote

STUDENT-CENTERED PERSONALIZATION OF INDIVIDUAL EDUCATION THROUGH REUSABLE AND AUTONOMOUS LEARNING UNITS - THE SPIRAL MODEL (ELDL - F134)

Sorana Cimpan, Francesco Floris, Marina Marchisio Conte and Sergio Rabellino

09:25-11:00 Session 13.2

Desirable goals and ICT

Room: Uranus

WHEN YOU SAY DISCRIMINATION, DO YOU MEAN...?: COMMUNICATION CHALLENGES AND CROSS-DISCIPLINARY TRANSLATION RISKS IN ARTIFICIAL INTELLIGENCE (ICT - F135)

Hilde G. Corneliussen, Gilda Seddighi and Cheshta Arora

THE SUSTAINABILITY OF SOCIAL NETWORKS: “SMALL-WORLD” NETWORKS AS A MEDIA COUNCIL (ICT - F107)

Gunjidmaa Gongor and Bolormaa Battsogt

INFORMATION TECHNOLOGIES AT A HIGHER SCHOOL OF REAL ESTATE IN PORTUGAL (ICT - S089)

Teresa Florentino

THE E-MARKETING STRATEGY INFLUENCES A DECISION TO BUY SKINCARE PRODUCTS (ICT - R113)

Supakorn Iamamporn, Pradit Songsangyos and Nuchsharat Nuchprayoon

09:20-11:05 Session 13.3

Emerging Technologies and Disruptive Innovation // Digital Strategy and Leadership

Room: Mercure

HOP, SKIP, AND ... JUMP! DIGITAL BUSINESS TRANSFORMATION AND BEHAVIOUR (DTIM - F048)

Nina Evans and Linda Zeelie

LEGAL X-RAY: AN APPROACH TO AUTOMATING INFORMATION EXTRACTION IN PORTUGUESE LEGAL DOCUMENTS (DTIM - F037)

Celso Araujo Fontes

IMPLEMENTATION OF INSTRUCTIONAL DESIGN FOR SELF-PACED LEARNING (DTIM - F086)

Kurt Englmeier

EDUCATION AND TECHNOSCIENCES (DTIM - R034)

Luiz Roberto Alves

11:00-11:30 Coffee Break

11:30-13:00 Session 13.4

Higher and Further Education // Learning Analytics

Room: Panorama

RATING UNIVERSITIES IN HONG KONG, MACAO AND SINGAPORE BY GENERATIVE ARTIFICIAL INTELLIGENCE (AI): ARE VARIOUS AI MODELS CONSISTENT? (ELDL - F121)

Victor K. Y. Chan

TAILORING EDUCATION TO DATABASE TRENDS: CHALLENGES IN CURRICULUM DESIGN FOR ADVANCED DATABASE TOPICS (ELDL - F090)

Rosa Maria Reis, Bertil P. Marques and Ricardo Almeida

LEARNING ANALYTICS VISUALISATIONS OF SCHOOL DROPOUT IN VOCATIONAL EDUCATION (ELDL - F114)

Christos Samaras, Anna Mavroudi and Vassilios S. Verykios

11:40-12:50 Session 13.5

Visualization // Image Processing

Room: Uranus

A METHOD FOR EMBEDDING BIOMETRIC AND OTHER INFORMATION IN COLOR IMAGES OF FACES (CGVVCVIP - F021)

Nazym Kaziyeva, Georgy Kukharev and Kalybek Maulenov

A DEFORMABLE 3D ZEBRAFISH MODEL FOR BRIGHT-FIELD MICROSCOPY IMAGE SIMULATION (CGVVCVIP - S044)

Richárd Jám bor and Attila Tanács

A RECEPTIVE ENHANCED BASED MULTI-SCALE FEATURE FUSION NETWORK (CGVVCVIP - S054)

Guojun Mao and Xinchao Zhang

11:30-12:50 Session 13.6

Usability // HCI and Design education

Room: Mercure

NATURAL INTERACTION FOR MUSEUM INSTALLATIONS DISPLAYING CULTURAL HERITAGE: A CASE STUDY OF THE RECREATION OF THE TORRE DE LA PARADA (IHCI - F032)

Luis Antonio Hernández-Ibáñez, Viviana Barneche-Naya and Guillermo Franganillo-Parrado

PREDICTING STEM LEARNERS' PERFORMANCE IN SERIOUS GAMES FOR COMPUTATIONAL THINKING USING GAME LEARNING ANALYTICS FRAMEWORK (IHCI - F030)

Fatin Nasuha Abdul Razak, Amirrudin Kamsin and Hameedur Rahman

EXPLORING THE BENEFITS OF PHYSICAL FEATURES IN VIRTUAL REALITY ON CUSTOMER EXPERIENCE (IHCI - S042)

Robin Cherix, Maud Julmy, Marine Capallera, Julien Roland and Elena Mugellini

11:40-12:40 Session 13.7

Sustainability and Green IT

Room: Orion

STUDYING THE ENERGY CONSUMPTION OF INSTAGRAM FUNCTIONALITIES ON PC AND TABLET (STE - F044)

Elisa Jiménez, Carlos Pulido, Coral Calero, M^a Ángeles Moraga, Félix García and Alberto Gordillo

RESEARCH ON AN ABSORPTION AIR-CONDITIONING SYSTEM MADE FROM SUSTAINABLE MATERIALS (STE - F027)

Yuxian Zhou, Wenquan Wang and Xiuwei Li

12:50 – 14:20 Lunch Break

14:20 – 15:25 Session 13.8

Innovations in e-Assessment // Ethical Issues in e-learning

Room: Panorama

TEACHING ACADEMIC WRITING IN THE ERA OF LARGE LANGUAGE MODELS: A CASE STUDY (ELDL - F028)

Andrea Molinari and Elena Molinari

COGNITIVE LOAD MEASUREMENT WITH ELECTROENCEPHALOGRAPHY BASED ON MACHINE LEARNING ALGORITHM (ELDL - S038)

Yi-Hsuan Wang, Hsing-Yi Wu and Chun-Wang Wei

ADAPTING ASSESSMENT DESIGN: NAVIGATING TECHNOLOGICAL ADVANCES AND ACCESS TO INFORMATION (ELDL - R123)

Fran Greyling and Linda van Ryneveld

14:30-16:20 Session 13.9

Artificial Neural Networks and Learning methods

Room: Uranus

STRUCTURAL DAMAGE DETECTION BASED ON HYBRID ALGORITHM WITH SPARSE OBJECTIVE FUNCTION (BigDaCI - F053)

Guangcai Zhang, Wenlong Zhao, Chunfeng Wan, Xiaonan Zhang, Xiujia Liu and Youliang Ding

UNVEILING THE VALUE OF USER REVIEWS ON STEAM: A PREDICTIVE MODELING OF USER ENGAGEMENT APPROACH USING MACHINE LEARNING (BigDaCI - F056)

María Olmedilla, Leonardo Espinosa-Leal, José Carlos Romero-Moreno and Zhen Li

FEATURE SELECTIONS AND EXPLORATORY ANALYSIS FOR ML STOCK PREDICTIONS USING SET50 (BigDaCI - F022)

Gridaphat Sriharee

DIGITAL MAPPING OF VEHICLE LOADS TO STRUCTURAL STRAINS BASED ON M-H SAMPLING AND BILSTM NETWORK (BigDaCI - S050)

Xiaonan Zhang, Youliang Ding and Chunfeng Wan

14:20-16:30 Session 13.10

Design issues // Tools and technologies

Room: Mercure

REHASHING STORYTELLING IN THE MOBILE GAME: 'WALKING DEAD MATCH 3 TALES' CASE (GET - F039)

JaeJun Lee and Soyoun Eom

A PLAYFUL APPROACH TO EXTENDED REALITY GAME DEVELOPMENT BY INTEGRATING TANGIBLE AND VIRTUAL INTERFACES (GET - F052)

Hengbin Zhang, Xinyi Wu, Xiaoyang Wu and Ruowei Xiao

EXPLORATORY STUDY ON QUANTIFYING COMPLEXITY IN THE TEMPORAL STRUCTURE OF ELECTROACOUSTIC MUSIC (GET - F036)

Junpei Hayata, Shingo Honda, Soma Arai, Hidefumi Ohmura and Takuro Shibayama

USER-CENTERED DESIGN OF AN OMNIDIRECTIONAL TREADMILL VIRTUAL REALITY EXERGAME (GET - S043)

Daniel Cliburn, Vijay Kumar and Ethan Perez

REINFORCEMENT LEARNING TO GENERATE LEVELS FOR DESIRED DIFFICULTY (GET - S031)

Donghyun Lee and Kyounghsu Oh

14:30 – 16:30 Session 13.11

Data and Software Applications in Smart Cities // Security, Privacy and Identity Issues in Smart Cities

Room: Orion

BEHAVIORAL BASED DECISION-MAKING SCHEME FOR COOPERATIVE CONNECTED AUTOMATED MOBILITY (CSC - F028)

David Yagüe-Cuevas, Pablo Marín-Plaza, María Paz-Sesmero and Araceli Sanchis

REAL-TIME TRAFFIC MONITORING SYSTEM BASED ON COMPUTER VISION AND DEEP-LEARNING (CSC - F026)

Jaime Villa, Arturo de la Escalera and José M^a Armingol

TOURISM SUPPORT SYSTEM TO UTILIZE VIRTUAL REALITY SPACE AND DYNAMIC INFORMATION IN REAL TIME (CSC - F043)

Yuro Koga and Kayoko Yamamoto

A REVIEW ON DATA PROTECTION AND REGULATION IN SMART CITY CONCEPT (CSC - F060)

Andrej Ignjatić

15:30 – 16:30 Keynote Session

Room: Panorama

GENERATIVE AI: AFFORDANCES AND CHALLENGES FOR EDUCATION

Professor Helen Crompton, Executive Director of the Research Institute of Digital Innovation in Learning (RIDIL), Old Dominion University, USA

16:30-17:00 Coffee Break

17:00 – 19:20 Session 13.12

Pedagogical Models // Learning Theories and Approaches for e-learning // Digital media studies

Room: Panorama

THE OBSTACLES TO DIGITAL TRANSFORMATION AND THEIR IMPACT ON CYBER THREATS IN MOROCCAN HIGHER EDUCATION: A MULTI-CRITERIA APPROACH (ELDL - F135)

Abdelilah Chahid, Souad Ahriz, Kamal El Guemmat and Khalifa Mansouri

DIGITAL FOR WELFARE. STORIES OF “THIRD SECTOR” REALITIES FACING THE CHALLENGES OF DIGITAL TRANSFORMATION (ELDL - F125)

Dalia Gallico

PLAY2ESCAPE - A DIGITAL ESCAPE ROOM: IN MATH CLASSES FOR UNDERGRADUATE TOURISM STUDENTS - CASE STUDY (ELDL - F033)

Sónia Pais, Ana Elisa Sousa and Maria Sofia Lopes

FORMATION OF BACHELOR'S SKILLS IN THE FIELD OF MACHINE LEARNING AND INTELLIGENT DATA ANALYSIS (ELDL - F086)

Marina Lapenok, Sergei Patrushev and Lidiya Shestakova

SHIFTING PERCEPTIONS OF AI: AN INTEGRATED LEARNING PROGRAM IN THE MIDDLE SCHOOL SETTING (ELDL - S102)

Won Jung Kim and Sangjin An

17:00 – 19:20 Session 13.13

eHealth to improve Quality and Patient Safety // Applications

Room: Uranus

TOPOLOGICAL DATA ANALYSIS FOR SELECTION OF MACHINE LEARNING MODELS IN CEREBRAL STROKE DETECTION (EH - F052)

Aleksandra Vatian, Natalia Gusarova, Ivan Tomilov, Vladimir Shilonosov, Julia Valitova, Vladimir Sashin, Maria Bobrova, Stanislav Mashechkov, Tatiana Polevaya and Alexey Zubanenko

USING DESIGN METHODOLOGIES TO EXPLORE A PRE-SURGICAL SYSTEM (EH - F048)

Marko Cigljarev, Yefri Ventura, Christopher Pandolfi, Xavier Massé, Ana Rita Morais and Angela Jerath

MEAL-TAKING ACTIVITY MONITORING IN THE ELDERLY BASED ON SENSOR DATA: COMPARISON OF UNSUPERVISED CLASSIFICATION METHODS (EH - F051)

Abderrahim Derouiche, Damien Brulin, Eric Campo and Antoine Piau

INFORMATION SYSTEM FOR CALCULATING THE HIGHEST ALLOWED WHOLESALE PRICE OF MEDICINAL PRODUCT IN CROATIA (EH - F063)

Maja Fatiga and Sanja Grčić Plečko

AI-ENHANCED ANALYSIS OF BRAIN MORPHOMETRY LINKED TO FACTORS INFLUENCING MENTAL AND NEUROLOGICAL HEALTH OUTCOMES (EH - S046)

Paula Arandia, Christian Núñez, Christian Stephan-Otto, Raul Benitez and Christian Mata

17:00-19: 20 Session 13.14

Emerging Technologies and Disruptive Innovation

Room: Mercure

EXPLORING EMERGING BUSINESS MODELS FOR ELECTRIFIED MACHINERY (DTIM - F112)

Saeid Heshmatisafa and Marko Seppänen

METaverse TECHNOLOGY IN HIGHER EDUCATION: A CONCEPTUAL MODEL (DTIM - F084)

Mutaz M. Al-Debei, Omar Hujran and Hazar Y. Hmoud

EXPLORING CYBERSECURITY MINDSETS: A COMPARATIVE ANALYSIS OF AGE, LEADERSHIP, WORK EXPERIENCE AND EXPERTISE (DTIM - F078)

Gregor Eibl and Olga Litvyak

THE ROLE OF INTERACTIVITY IN VR MARKETING (DTIM - F029)

Hongxiao Yu and Haemoon Oh

DEVELOPMENT OF THE MODEL OF WORKING IN A HYBRID ENVIRONMENT (DTIM - S031)

Pradit Songsangyos, Supakorn Lamamporn and Mesith Chaimanee

17:00-19:00 Tutorial

Room: Orion

HOW TO DESIGN ONLINE STEM COURSES WITH CREATIVE LEARNING

Veronica Ruberti, Lorenzo Benussi, Chiara Ciociola and Flavio Renga, LINKS Foundation, Italy

Sunday, 14th July 2024

08:30-15:30 Welcome Desk - Room: Venus (closes for lunch 13:15 – 14:20)

08:55-11:00 Session 14.1

Affective User-Centred Analysis, Design and Evaluation

Room: Uranus

FOSTERING EMOTIONAL ATTACHMENTS TO CARS: INSIGHTS FROM A FOCUS GROUP STUDY (IHCI - F048)

Mareike Grund, Ingo Totzke and Arnd Engeln

AN ANALYSIS OF INTERACTION BEHAVIORS IN PERSONALIZED LEARNING (IHCI - F025)

Emine Cabı and Hacer Türkoğlu

DO WE HAVE GESTURES IN OUR HANDS? - ON THE INFLUENCE OF HAND CHARACTERISTICS ON MID-AIR GESTURE RECOGNITION (IHCI - F034)

Lisa Graichen and Matthias Graichen

NONINVASIVE VISUALIZATION OF MUSCLES DURING SWALLOWING USING A MUSCLE DEFORMATION SENSOR (IHCI - S045)

Satoshi Shimabukuro, Ryouta Arashiro and Emi Tamaki

CLARIFYING DEFINITIONS: A SCOPING REVIEW OF DATA PHYSICALIZATION IN HUMAN-COMPUTER INTERACTION (IHCI - R029)

Giorgia Burzio and Venere Ferraro

08:55-09:55 Session 14.2

Healthcare Data Architecture Standards

Room: Mercure

A DIGITAL HEALTH PLATFFORM FOR SHARED EHR SERVICES: REAL WORLD CASE STUDIES (EH - F066)

Ricardo Gonçalves, André Toffanello and Ricardo Puttini

INTEROPERABILITY PLATFORMS: A COMPONENT BASED APPROACH TO DERIVE FUNCTIONAL CLASSIFICATION (EH - F071)

Martin Staemmler

09:00-10:00 Session 14.3

Blended Learning

Room: Orion

IMPLEMENTING BLENDED LEARNING AS A CULTURALLY RESPONSIVE TEACHING METHOD TO THE NEEDS OF STUDENTS WITH CULTURAL AND LINGUISTIC DIVERSITY (ELDL - F031)

Vaso Anastasiou, Charoula Angeli and Yiota H. Diakou

DETECTING BLENDED LEARNING, COLLABORATIVE LEARNING AND INTERNATIONALISATION IN MILITARY EDUCATION: A SYSTEMATIC LITERATURE REVIEW (ELDL - F131)

Alice Barana, Giulia Boetti, Antonino Cambria, Marina Marchisio Conte and Enrico Spinello

09:10-11:00 Session 14.4

Technological Issues

Room: Panorama

PREDICTING MOBILE LEARNING APPS' USER RATING BASED ON THEIR USABILITY EVALUATION BY GENERATIVE ARTIFICIAL INTELLIGENCE (AI) (ELDL - F120)

Victor K. Y. Chan

TINKERCAD AS A VIRTUAL LABORATORY (ELDL - F046)

József Udvaros and Norbert Forman

EXAMINING ACCESSES TO OPEN ACCESS SIMULATOR OBJECTS IN ENGLISH AND IN PORTUGUESE (ELDL- F056)

Ana M. B. Pavani and William S. Barbosa

THE IMPACT OF THE MAKER MOVEMENT ON ENTREPRENEURSHIP FROM A RESOURCE PERSPECTIVE (ELDL- S093)

Tsai-Hsin Chen, Tsz-Yu Huang and Chun-Wang Wei

10:00-11:00 Keynote Session

Room: Mercure

MANAGING HEALTHCARE TRANSFORMATION TOWARDS INTELLIGENT, ETHICAL AND SUSTAINABLE 5P MEDICINE ECOSYSTEMS

Prof. Dr. habil. Bernd Blobel, FACMI, FACHI, FHL7, FEFMI, FIAHSI, Medical Faculty, University of Regensburg, Germany

10:10-11:00 Posters Session

Room: Orion

APPLYING VIRTUAL LEARNING ENVIRONMENTS ASSISTS LANGUAGE LEARNERS TO STUDY ENGLISH (ELDL - P024)

Pei-Lin Liu and Chiu-Jung Chen

DESIGN OF STACKABLE CERTIFICATE COURSE MODULES IN AN ONLINE PROGRAM (ELDL - P025)

Parviz Ghandforoush

LEARNING ANALYTICS WITH MAPPER: INVESTIGATING PARAMETER CONFIGURATION (ELDL - P099)

Hitoshi Inoue, Koichi Yasutake, Osamu Yamakawa, Takahiro Tagawa, Takahiro Sumiya and Kiyomi Okamoto

A PRELIMINARY STUDY ON ALLOWING STUDENTS TO MODIFY PARTIAL TEXT OF A PICTURE E-BOOK TO CREATE A NEW STORYLINE FOR ENGLISH LEARNING (ELDL - P105)

Gloria Yi-Ming Kao

USING EYE-GAZE TO EVALUATE E-HEALTH DECISION SUPPORT SYSTEMS (EH - P026)

Elizabeth A. Krupinski

ENHANCING HEALTH CARE THROUGH REMOTE SERVICES AND INTERACTIVE TECHNOLOGIES (EH - P075)

Ssu-Hsuan Lu

HARDWARE SIMULATION IN CYBER RANGES FOR CYBER PHYSICAL SYSTEM SECURITY TRAINING (DTIM - P093)

Lórinč Thurnay, Oliver Jung and Gregor Eibl

CONTROLLING ANALYTICS IN UNIVERSITY TEACHING (DTIM - P103)

Alexander Baumeister

11:00-11:30 Coffee Break

11:30-12:50 Session 14.5

Distance Learning

Room: Panorama

DIGITAL TECHNOLOGIES AND THEIR IMPACT ON METACOGNITIVE ASPECTS IN LEARNING RECOVERY IN SCIENTIFIC AND HUMANISTIC SUBJECTS (ELDL - F128)

Andrea Balbo, Alice Barana, Giulia Boetti, Marina Marchisio Conte and Sara Omegna

GATEWAY TO SUCCESS: IMPROVING ACADEMIC ACHIEVEMENT THROUGH ONLINE MODULES (ELDL - F107)

Linda van Ryneveld

COLLABORATIVE ONLINE INTERNATIONAL LEARNING (COIL): SWOT ANALYSIS FROM A TECHNICAL ENGINEERING COURSE PERSPECTIVE (ELDL - S077)

Jaime Garbanzo-León, Luís Jorge Gonçalves and Jorge Medina

11:25-13:10 Session 14.6

Globalization and ICT // ICT and Effects on Humans

Room: Uranus

THE POTENTIAL OF USING THE BLENDED LEARNING FORMAT IN SOCIAL UNIVERSITIES IN ST. PETERSBURG (ICT - F026)

Olga Ignatjeva, Iuliia Platonova and Alexander Pletnev

THE EFFECTS OF ECONOMIC STATUS ON ACADEMIC ACHIEVEMENT - BASED ON PISA 2018 (ICT - F119)

Kyung Sook Lee

DIGITAL LEGACY IN A DIGITAL WORLD (ICT - F079)

Thomas Keller, Mirella Moser and Hugo Bossi

FASHION DIGITAL WELLNESS: A BEHAVIORAL ECONOMY APPROACH TO SOCIAL MEDIA AWARENESS THROUGH PERSONALIZED IMAGERY (ICT - R066)

Mariam Sameh Hassaan, Sarah Hassaan and Brenno Menezes

11:30-13:00 Session 14.7

Development Methodologies // Emerging Practices

Room: Mercure

FROM A PARTICIPATORY CITY TO A COLLABORATIVE CITY: VIDEO GAMES AS AN EMERGENT TOOL FOR COLLABORATIVE DESIGN (GET - F017)

Khalil Morad El Ghilali, Iman Meriem Benkirane, Vassilis Bourdakos and Giorgos Papakonstantinou

USING GAMIFICATION FOR TEAMBUILDING, COMMUNICATION AND INNOVATION – RESULTS FROM A LEGO® SERIOUS PLAY® WORKSHOP (GET - F042)

Julia Thurner-Irmeler and Marietta Menner

TRANSDISCIPLINARY FUTURES: ENHANCING GAME DESIGN AND INTERACTIVE MEDIA EDUCATION IN THE HIGHER EDUCATION LANDSCAPE (GET - R028)

Bradley Young

DEVELOPMENT OF A COMPETENCE MEASUREMENT TOOL WITHIN A CUSTOMIZABLE GAMIFICATION ENVIRONMENT (GET - R037)

Manuela Sachse, Christoph Laroque and Lisa Strauch

11:30-12:50 Session 14.8

Smart City as an Integrated Ecosystem

Room: Orion

IS TOYOTA’S WOVEN CITY A SMART CITY? (CSC - F053)

Hiroshi Ito and Kazuhiko Kato

TRANSFORMING ROME: STRATEGIC INITIATIVES FOR DEVELOPING A SMART CITY (CSC - F063)

Vincenzo Gattulli and Spartaco Paris

LEVERAGING AI FOR ENHANCING DISASTER RESILIENCE IN SMART COASTAL CITIES: STRATEGIES FOR TOMORROW'S URBAN CHALLENGES (CSC - S031)

Rouzbeh Nazari, Mujungu Lawrence Museru and Maryam Karimi

12:50 – 14:20 Lunch Break

14:20-15:20 Special Talk

Room: Panorama

EVERY TEACHER HAS THEIR OWN VOICEBOT: IS IT WORTH THE COSTS?

Cathie Norris, Associate Dean for Research & Development, University of North Texas, USA, Elliot Soloway, Arthur F. Thurnau Professor, University of Michigan, USA and Anne Tapp, Professor, Dept. of Teacher Education, College of Education, Saginaw Valley State University, USA

14:20-15:20 Session 14.9

Big Data Algorithms and Architectures

Room: Uranus

CYBER-PHYSICAL CLOUD TESTBED ON RASPBERRY PI MICROCOMPUTERS (BigDaCI - S028)

Adolf Kamuzora, Zakarya Farou, Tamás Jursonovics, Peter Pogrzeba and Imre Lendák

LSTM NETWORK MAPPING MODEL FOR TEMPERATURE INDUCED-CRACK WIDTH VARIATION OF CONCRETE CABLE-STAYED BRIDGE (BigDaCI - S047)

Xujia Liu, Youliang Ding, Chunfeng Wan and Xiaonan Zhang

IMPLEMENTING BUSINESS INTELLIGENCE IN HIGHER EDUCATION: A ROADMAP FOR DASHBOARD DEVELOPMENT (BigDaCI - S034)

Romeu Sequeira, Paulo Alves, Arsénio Reis and Frederico Branco

14:20-15:20 Session 14.10

Education

Room: Mercure

DIGITAL TRANSFORMATION IN HIGHER EDUCATION: A ROADMAP (DTIM - F063)

Anusuyah Subbarao and Nasreen Khan

DEVELOPING A MUSICIAN'S DIGITAL IDENTITY AS A CO-CREATOR OF THE DIGITAL ECOSYSTEM (DTIM - F026)

Jelena Duras Gled and Ljerka Luic

14:20-15:30 Session 14.11

Computer Vision

Room: Orion

BIDIRECTIONAL FEATURE PYRAMID FOR FACE DETECTION IN DENSE CROWD SCENES (CGVCVIP - F019)

Yajuan Wei, Zhiejie Xu, Chuan Dai and Wanju Zhang

VIDEO-BASED PIANO PERFORMANCE EVALUATION VIA DYNAMIC TIME WARPING (DTW) (CGVCVIP - S042)

Vincentius Marcell and Chuan-Kai Yang

BONE POROSITY AND THICKNESS EVALUATION BY ULTRASONIC SIGNALS USING PATTERN RECOGNITION (CGVCVIP - S022)

Maksims Mamontovs, Aleksandrs Sisojevs and Alexey Tatarinov

15:35 – [Conference Tour and Dinner](#)

Monday 15th July 2024

08:30-13:10 Welcome Desk – Room: Venus

08:55-11:00 Session 15.1

e-Health // Mobile Applications

Room: Panorama

VERIFICATION OF BODY SURFACE AREA-CALCULATING ANDROID APPS (EH - F044)

Ian Almutawa and Iulian Neamtii

TOWARDS PRECISE DETECTION OF PERSONAL INFORMATION LEAKS IN MOBILE HEALTH APPS (EH - F083)

Alireza Ardalani, Joseph Antonucci and Iulian Neamtii

TEST AMPLIFICATION FOR MEDICAL APPS IMPLEMENTING LINEARLY-APPROXIMATABLE FUNCTIONS (EH - F079)

Ian Almutawa, Muyeed Ahmed, Iulian Neamtii and Peter Flis

MANAGEMENT BY DIGITAL RESPONSIBILITY IN HEALTH ORGANIZATIONS (EH - S031)

Jutta Juliane Meier, Christian Weigand, Jochen Bauer and Björn Eskofier

ADVANCING USER-CENTRIC DESIGN AND TECHNOLOGY ADOPTION FOR AGING POPULATIONS:

A MULTIFACETED APPROACH (EH - R056)

Andreea Stamate, Magda Velciu, Cosmina Paul, Luiza Spiru and Mircea Dan Marzan

09:00-11:00 Session 15.2

Sustainability and Education // Other

Room: Mercure

GREEN IT ADOPTION BY SOFTWARE DEVELOPERS: KEY FACTORS FROM THE THEORY OF PLANNED BEHAVIOR PERSPECTIVE (STE - F019)

Yassine Talas and Hajer Rabii

ASSESSMENT OF HYGROTHERMAL PROPERTIES OF ADOBE BRICKS. RESEARCH EXPERIENCE AT KEENE STATE COLLEGE (STE - F046)

Fernando del Ama Gonzalo, Paul Fowler and Zachary Punch

A SUSTAINABILITY CAMPUS WALK AS A GAMIFIED TYPE OF BLENDED LEARNING (STE - F050)

Anna-Marie Tuomala and Alexandra Maksheeva

GENERATIONAL PERSPECTIVE ON ENERGY-EFFICIENCY AWARENESS: A COMPARATIVE STUDY (STE - F047)

Gabriella Francesca Amalia Pernice, Valeria Orso and Luciano Gamberini

09:10-11:00 Session 15.3

Life role and ICT // Life environment and ICT

Room: Uranus

TECHNOLOGICAL CITIZENSHIP IN THE DIGITAL AGE (ICT - F054)

Anne Marte Gardenier and Lambert Royackers

E-VOTING IN THE LEBANESE PARLIAMENT: AN INVESTIGATIVE STUDY (ICT - F104)

Bassima Issa and Bassam Hussein

IMPACT OF BUSINESS-INTELLIGENCE ON IMPROVING THE ACTIVITIES OF AN NGO SUPPORTING RURAL FARMERS IN LUBUMBASHI (ICT - F108)

Yann Munganga, Israël Kayamba, Thierry Ilunga, Cedrick Vumisa and Efreem Mbaki

DIGITALIZED CITIZENS? A SUCCINCT LITERATURE REVIEW ON CHINA'S SOCIAL CREDIT SYSTEMS (ICT - S022)

Ariane Ollier-Malaterre

11:00-11:30 Coffee Break

11:30-12:45 Session 15.4

Designing e-Learning Settings

Room: Panorama

PARTICIPATORY PROCESSES IN THE CONTEXT OF THE DEVELOPMENT AND IMPLEMENTATION OF (DIGITAL) LEARNING OFFERINGS: A CASE STUDY ON THE SUPPORT OF INTERNSHIP PHASES IN BUSINESS MANAGEMENT STUDIES (ELDL - F095)

Yvonne Bönninger, Anne Florence Merkle, Elke Mährlitz-Galler, Gunnar Voß, Beate von Velsen-Zerweck and Michael A. Herzog

STUDENTS' PERCEPTION OF INTERNATIONAL COLLABORATION AND CULTURAL UNDERSTANDING IN DIGITALLY DRIVEN EDUCATION (ELDL - F122)

Marina Marchisio Conte, Fabio Roman, Matteo Sacchet, Enrico Spinello, Anna Molnár, Shay Attias, Paul Tudorache, Jaroslav Kompan and Andrew Dolan

ADVANCING EARLY CHILDHOOD EDUCATION: A CONCEPTUAL FRAMEWORK FOR ARTIFICIAL INTELLIGENCE APPLICATIONS IN EARLY CHILDHOOD EDUCATION (ELDL - R139)

Hesham Alomyan

11:30-12:50 Session 15.5

Data Mining Topics and Applications

Room: Uranus

RESEARCH ON KNOWLEDGE EXTRACTION OF CHINESE SHIP TECHNICAL SPECIFICATION (BigDaCI - F045)

Kexin Cheng and Zuhua Jiang

FACE RECOGNITION ATTENDANCE SYSTEM (BigDaCI - F031)

Zirije Hasani, Jakup Fondaj, Rrezart Kallaba, Xhafer Muja and Endrit Jelliqi

COMPARATIVE ANALYSIS OF CHANGE DETECTION METHODS IN CYBER-PHYSICAL SYSTEMS (BigDaCI - S030)

Máté Hekfusz, Vrushali Mahajan, Adolf Kamuzora and Imre Lendák

11:30-12:40 Session 15.6

Sustainable Innovation

Room: Mercure

THE ROLE OF DIGITAL TECHNOLOGIES AND STAKEHOLDERS IN PROMOTING BIODIVERSITY (DTIM - F045)

Mauro Capestro and Stefano Denicolai

UNLOCKING MENTAL WELLNESS: THE VITAL ROLE OF INSURANCE IN DIGITAL MENTAL HEALTH ENGAGEMENT (DTIM - S073)

Nasreen Khan, Anusuyah Subbarao, Shereen Khan, Tan Booi Chen and Rahimah Samsudin

ARTIFICIAL INTELLIGENCE ENABLING CIRCULAR BUSINESS MODELS IN INDUSTRIAL FIRMS (DTIM - S106)

Rana Mostaghel, Pejvak Oghazi, Alessandra Bagnato, Gunnar Wildforss and Yi Wei

12:50 Best Paper Awards Ceremony and Closing Session

Room: Panorama

Profs. Pedro Isaias and Paula Miranda