CONFERENCE PROGRAM

International Conferences Sessions
Applied Computing 2023 (AC 2023) and
WWW/Internet 2023 (ICWI 2023)

<mark>Saturday 21st, October 2023</mark>

08:30-19:15 Welcome Desk (closes for lunch – 13:00-14:10)
(Room: Selvagens IV)

09:15-09:30 Session O – Opening Session
(Room: Selvagens III)

OPENING SESSION   *Profs. Pedro Isaías and Paula Miranda*

09:30-11:00 Session 21.1
Semantic Web and XML
(Room: Selvagens III)
Chair: Yoshihiro Okada

PROPOSAL OF A KNOWLEDGE GRAPH USING INTERNATIONAL SEMANTIC STANDARDS IN THE OIL AND GAS AREA (ICWI F053)   *Elvismary Molina de Armas, Geiza Maria Hamazaki da Silva, Yenier Torres Izquierdo, Melissa Lemos Cavaliere and Eduardo Thadeu Leite Corseuil*   **NATURALMSEQUERIES - A NATURAL WAY TO QUERY MATERIAL SCIENCES ENGINEERING DATA EXPERIMENTS (ICWI F032)**   *André Valdestilhas, Soudeh Javamasoudian, Ghezal Ahmad Jan Zia, Thilo Muth, Thomas Hanke and Horst Fellenberg*   **THE SOLID DEVELOPMENT EXPERIENCE: GIVING DEVELOPERS THE TOOLS THEY NEED (ICWI F028)**   *Koen Luyten, Gregory Van Seghbroeck, Wannes Kerckhove, Thomas Dupont, Filip De Turck and Bruno Volckaert*

09:35-11:00 Video Session 21.2
(Room: Selvagens II)

UNLOCKING THE VALUE OF CULTURAL HERITAGE IMAGES THROUGH SEMANTIC TECHNOLOGIES – TAKE "MISS" AS EXAMPLE (ICWI F035)   *Yang Xin, Zhang Junjie, Fu Yaming and Chen Tao*   **DIGITAL AND DIALOGIC LOOP PRINCIPLE IN OFFICIAL WEBSITES OF THE PORTUGUESE COMMUNICATION AGENCIES (ICWI F043)**   *Ana Pereira and Adriana Oliveira*   **DOES IT WORK ON CONTENT MARKETING WITH SHORT-VIDEO IN CHINA? (ICWI F045)**   *Chun-Chi Chen*   **SECURITY INFORMATION AND EVENT MANAGEMENT EDO4SIEM - A GENERIC MODEL FOR EVALUATION, DEPLOYMENT AND OPERATION (AC F020)**   *Maximilian Rosenberg, Bettina Schneider, Christopher Scherb and Petra Maria Asprion*   **A NOVEL APPROACH FOR SECURE STEGANOGRAPHY: INTER-FORMAT CONVERSION COMPENSATION FOR ENHANCED DATA SECURITY (AC F041)**   *Hasan Azooz, Khawla Ben Salah, Monji Kherallah and Mohamed Saber Naceur*   **IMPROVING ALGEBRAIC EXPRESSION GENERATION USING CROW SEARCH BASED GENETIC ALGORITHM (AC S062)**   *Praful Kumar Prajapati, Alisha Raj and Jitendra Pradhan*

11:00-11:30 Coffee Break (*Foyer*)

11:30-13:00 Session 21.3
Web-based multimedia technologies // e-Learning
(Room: Selvagens III)
Chair: Koen Luyten

THE EFFECTIVENESS OF ADVERTISING IN ONLINE GAMES (ICWI F083)
Jorge Esparteiro Garcia, José Palha and Ricardo Queirós
DEVELOPMENT FRAMEWORK BASED ON OPENVSLAM FOR WEB-BASED VR TOURS USING 360VR VIDEOS (ICWI F070)
Yoshihiro Okada, Kosuke Kaneko and Wei Shi
ENHANCING THE DIGITAL SKILLS OF TEACHERS IN AN ONLINE SETTING (ICWI F071)
Julie Madelen Madshaven, Frank Reichert and Haakon Sundbø

11:30-12:50 Session 21.4
Fundamental Concepts and Engineering
(Room: Selvagens II)
Chair: Eleni Aretoulaki

MOVING TOWARDS QUALITY 5.0: AN INTERNET OF VEHICLE EXAMPLE (AC F082)
Tauheed Waheed and Eda Marchetti
DECLARATIVE PROGRAMMING IN MODERN IMPERATIVE LANGUAGES (AC S031)
Lutz Hamel
REQUIREMENTS ENGINEERING WITH MDA: TOWARDS A UNIFIED FRAMEWORK (AC F038)
Fatima Meskine and Safia Nait-Bahloul

13:00-14:15 Lunch Break (Restaurant "*Oceano*" 2ⁿᵈ Floor)

14:15-15:15 Session KL – Keynote Presentation
(Room: Selvagens III)

"BACK TO THE DIFFERENCES: RETHINKING INFORMATION SEARCH (AND RECOMMENDATION) ON THE WEB"
Professor Sean Siqueira, Department of Applied Informatics, Federal University of the State of Rio de Janeiro (UNIRIO), Brazil

15:20-16:15 Session T1
Tutorial 1 (Part I)
(Room: Selvagens III)

PRACTICAL DATA SCIENCE USING THE SHELL (T027)
Andreas Schmidt and Mohamad Anis Koubaa

15:20-16:15 Session T2
Tutorial 2 (Part I)
(Room: Selvagens II)

HIGH-LEVEL INTERACTION DESIGN FOR AUTOMATED WEB GUI GENERATION (T024)
Hermann Kaindl

16:15-16:45 Coffee Break (*Foyer*)

16:45-18:50 Session T1
Tutorial 1 (Part II)
(Room: Selvagens III)

PRACTICAL DATA SCIENCE USING THE SHELL (T027)
Andreas Schmidt and Mohamad Anis Koubaa

16:45-18:50 Session T2
Tutorial 2 (Part II)
(Room: Selvagens II)

HIGH-LEVEL INTERACTION DESIGN FOR AUTOMATED WEB GUI GENERATION (T024)
Hermann Kaindl

08:30-15:45 Welcome Desk (closes for lunch – 13:00 to 14:10)
(Room: Selvagens IV)

09:10-11:00 Session 22.1
Application Fields
(Room: Selvagens III)
Chair: Melanie Steiner

A PROCESS FLOW COMPOSABLE OPENDATA MASHUP TOOL AND ITS EFFECTS EVALUATION (AC F051)
Satoshi Yashiro, Norihisa Komoda and Takenao Ohkawa
AGENTS AND TRUST IN THE METAVERSE (AC F037)
Thomas Keller, Danny Wang and Elke Brucker-Kley
EVALUATION OF GPU-CENTRIC EMBEDDED ARCHITECTURES IN THE FIELD OF NEUROMUSCULAR EMG-BASED AI (AC F014)
Simon Pfenning, Raul C. Simpetru, Niklas Pollak, Alessandro Del Vecchio and Dietmar Fey
AN IOT VIRTUAL SENSOR FOR INDOOR HEALTH RISK ASSESSMENT (AC S044)
Lorenzo Calisti, Paolo Capellacci, Giuditta Schiavano, Asja Conti, Giulia Amagliani, Cecilia Papalini, Giorgio Brandi and Emanuele Lattanzi

11:00-11:30 Coffee Break (*Foyer*)

11:30-13:00 Session 22.2
Data Analytics and Machine Learning // Smart Cities
(Room: Selvagens III)
Chair: Jorge Esparteiro Garcia

TOWARDS A MACHINE-LEARNING ARCHITECTURE FOR EFFICIENT RESOURCE MANAGEMENT (ICWI F016)
Alexandros Kostopoulos, Ioannis P. Chochliouros, John Vardakas, Christos Verikoukis, Arifur Rahman, Andrea P. Guevara, Robbert Beerten, Philippe Chanclou, Simon Pryor, Emmanouel Varvarigos and Polyzois Soumplis
A PROPOSED DRONE-ENABLED PLATFORM FOR HOLISTIC DISASTER MANAGEMENT (ICWI S065)
Eleni Aretoulaki, Stavros T. Ponis, George Plakas, Dimitra Tzanetou and Antonios Kitsantas
A BLOCKCHAIN-BASED APPLICATION FOR FOOD WASTE REDUCTION (ICWI S066)
Stavros T. Ponis, George Plakas, Eleni Aretoulaki, Dimitra Tzanetou and Antonios Kitsantas
A SMART ENVIRONMENT MONITORING SYSTEM FOR MITIGATING MARINE LITTERING (ICWI S081)
Dimitra Tzanetou, Stavros T. Ponis, George Plakas, Eleni Aretoulaki and Antonios Kitsantas

13:00-14:15 Lunch Break (Restaurant "*Oceano*" 2nd Floor)

14:15-15:20 Session 22.3
Human Computer Interaction and Usability
(Room: Selvagens III)
Chair: André Valdestilhas

CYBER ETHICS OF BLOCKCHAIN, AI AND WORLDCOIN (ICWI R082)
Dario Elias Félix de Oliveira Rodrigues
HOW GOOD UX DESIGN ENHANCES THE VALUE OF QUALITY PRODUCTS: AN EXPERIENCE REPORT ON APPLYING INTEGRATED UX LEAN IN SCRUM (ICWI F027)
Sydhia Mara Valente Moreira, Bruno Araújo Bonifácio, Rafael Pedrozo de Araújo, Juarez Pará Neto and Thiago Soares
PIONEERING WOMEN IN COMPUTING: A CULTURAL WEBSITE BASED ON INFORMATION ARCHITECTURE (ICWI S050)
Lina García-Cabrera, José-María Serrano and Irene Pedrosa-García

15:30 – Social Event (meeting point at the "*Foyer*")

08:30-13:15 Welcome Desk
(Room: Selvagens IV)

09:30-11:00 Session 23.1
Human-centred Computing // Intelligent systems
(Room: Selvagens III)
Chair: Andreas Schmidt

WHAT COULD POSSIBLY GO WRONG? OR: HOW TO LIVE WITH AI? (AC S047)   *Alessandro Rigutto*   **ACTIVE ANCHORS: SIMILARITY BASED REFINEMENT LEARNING (AC F054)**   *Connor Clarkson, Michael Edwards and Xianghua Xie*   **A NO-CODE WEB APP FOR SUPPORTING DECISION MODELLING OF CLUSTERING PROBLEMS (AC S057)**   *Helder Gomes Costa and Leonardo Fernandes Costa*   **HUMAN IN FOCUS: EVALUATION WITH ELECTRO GRAPHIC METHODS AND ARTIFICIAL INTELLIGENCE (AC S067)**   *Melanie Steiner and Dieter Meiller*

11:00-11:25 Coffee Break (*Foyer*)

11:25-12:45 Session 23.2
e-Society // Applications and Uses // Other
(Room: Selvagens III)
Chair: Xianghua Xie

THE INFLUENCE OF CYBERSECURITY VULNERABILITY PERCEPTION ON E-GOVERNMENT ADOPTION BY CITIZENS IN DEVELOPING COUNTRIES (ICWI F047)   *Willard Munyoka*   **ADDRESSING ACCESSIBILITY, AFFORDABILITY AND SUSTAINABILITY BARRIERS FOR BROADBAND INTERNET ACCESS AND PENETRATION IN RURAL AREAS (ICWI F044)**   *Sicelokuhle Oscar Ngwenya, Reolyn Heymann, Theo G. Swart and Albert A. Lysko*   **AUGMENTED REALITY AS A SUPPORT FOR THE TEACHING-LEARNING PROCESS IN THE SUBJECT OF ENTERPRISE ARCHITECTURE (ICWI S029)**   *Nelson Salgado-Reyes, Suyana Arcos-Villagomez and Susana Masapanta-Carrión*

12:45 Best Paper Awards Ceremony and Closing Session
(Room: Selvagens III)

Profs. Pedro Isaías and Paula Miranda