Final Program of the MCCSIS 2019
Multi Conference on Computer Science and Information Systems
Conference Sessions:
e-Health 2019

**Wednesday, 17th July 2019**

08:00-19:00 Welcome Desk

09:45-10:00 Session O – Opening Session
(Room: Auditório C302)

Prof. Mário Macedo

10:00-11:00 Session KL1 – Keynote Presentation
(Room: Auditório C302)

**TITLE** (available soon)

Prof. Dr. Miguel Coimbra, Faculdade de Ciências da Universidade do Porto, Portugal

11:00-11:30 Coffee Break

11:30-13:00 Session FP 17.1
Applications
(Room: Auditório C302)

Chair: Mário Macedo

**ELECTRONIC HEALTH RECORD (EHR) ADOPTION IN SOUTH AFRICAN HEALTHCARE CENTRES: A CASE OF NW PROVINCE (F162)**
Thatoyaone Modise, Nehemiah Mavetera and Mmaki Jantjies

**SECONDARY USE OF CLINICAL DATA FOR SCIENTIFIC RESEARCH PURPOSES IN THE DITAS PROJECT (F159)**
Paola Aurucci, Ilio Catallo, Mariet NouriJanian, Andrea Micheletti and Alberto Sanna

**DATA PROCESSING APPROACHES FOR LUNG CT-IMAGE ANALYSIS UNDER RESOURCE CONSTRAINTS (F117)**
Aleksandra Vatian, Artjom Lobantsev, Nikita Gorokhov, Mikhail Mirzayanov, Georgit Korneev, Natalia Gusarova and Anatoly Shalyto

13:00-14:30 Lunch Break

14:30-16:20 Session FSP 17.2
eHealth Architectures
(Room: Auditório C302)

Chair: Richard Hartman

**ACCEPTANCE AND USABILITY OF MEDICAL INFORMATICS AMONG PHYSICIANS IN BAHRAIN (F017)**
Misbheen M. Aqleh, Mukhtar S. Al-Hashimi, Allam Hamdan and Anjum Razzaque

**DEPLOYMENT OF ELECTRONIC MEDICAL PRESCRIPTIONS FOR AMBULATORY CARE IN BELGIUM (F089)**
Marc Nyssen and Yelina Piedra Salomón

**EVALUATING A REMOTE HEALTH MONITORING APPLICATION POWERED BY BLUETOOTH (F157)**
Maryam Vahabi, Hossein Fotouhi, Mats Björkman and Maria Lindén

**CERTIFICATION OF COMPONENT-BASED PARTICLE THERAPY SOFTWARE (S087)**
Carlos F. Afonso, Luigi Casalegno and Cristiana Larizza
16:30-17:00 Coffee Break

17:00-18:50 Session FSP 17.3
Management Issues
(Room: Auditório C302)
Chair: Marc Nyssen

NEW SYSTEM ECONOMIC EVALUATION OF EHEALTH INNOVATIONS (F059)
Angela Martin, Delphine Cosandier-Rimele, Corentin Canu and Gabrielle Breda

ROC-BAC: ROLE AND CONTEXT BASED ACCESS CONTROL MODEL FOR THE HEALTHCARE ENVIRONMENT (F021)
Zanifa Omary

ANALYSIS OF OPEN HEALTH DATA QUALITY USING DATA OBJECT-DRIVEN APPROACH TO DATA QUALITY EVALUATION: INSIGHTS FROM A LATVIAN CONTEXT (F136)
Anastasija Nikiforova

SECURE AND EFFECTIVE CONSENT SYSTEM (S143)
Hysun-A Park

17:00-18:10 Session FSP 17.4
Applications // Other
(Room: Auditório C202)
Chair: Mário Macedo

EXPLAINING AI MODELS FOR CLINICAL RESEARCH: VALIDATION THROUGH MODEL COMPARISON AND DATA SIMULATION (F127)
Qing Zeng-Treitler, Yijun Shao, Douglas Redd, Joseph Goulet, Cynthia Brandt and Bruce Bray

ERROR QUANTIFICATION TOOL OF HEALTH RECORDS FOR DEVELOPING COUNTRIES (S156)
Rose Nakasi, Ernest Mwebaze, Aminah Zawedde and Gilbert Matiga

TOTAL EXPOSURE HEALTH (S084)
Richard Hartman and Mark Oxley

19:00-Welcome Cocktail
Thursday, 18th July 2019

08:15-15:45 Welcome Desk

08:50-10:10 Session FSP 18.1
Mobile Applications
(Room: Auditório C302)
Chair: Hossein Fotouhi

ASTRONOMY FOR THE BLIND AND THE VISUALLY IMPAIRED (F071)
John Gialelis, Andreas Papalambrou and Aristeidis Hlias

POTENTIALS EVALUATION FOR INSTANT USABILITY OF SMARTPHONE APPS IN HEALTH AND SPORTS
ENDURANCE ACTIVITY TRACKING (F119)
Hans Weghorn

HOW INSPIRING IS YOUR APP? A USABILITY TAKE ON AN APP FOR ASTHMA MEDICATION ADHERENCE
(S058)
Ana Ferreira, Rute Almeida, Cristina Jácome, José Fernandes, João A. Fonseca and Pedro Vieira-Marques

10:20-11:00 Poster Session 18.2
(Foyer)
Chair: Mário Macedo

WHATSAPP: A TOOL FOR ADHERENCE TO ASYMPTOMATIC CHRONIC-DISEASE DRUG THERAPIES? (P022)
Amanda Caroline Sartori, Julio de Souza Sá, Marcelo Piccinin Bernuci, Ely Mitte Massuda, Tiago Franklin Rodrigues Lucena and Mirian Ueda Yamaguchi

ANALYSIS OF MOBILE APPLICATIONS FOR DIABETES SELF-MANAGEMENT IN THAILAND (P025)
Maneerat Rattanamahattana and Palang Rungsarng

TRACEABILITY AND MANAGEMENT OF MEDICINES AND MEDICAL DEVICES AT HOME: THE CRUCIAL
ROLE OF THE DIGITAL SUPPORT (P090)
Paolo Locatelli, Federica Cirilli, Eliana Panno and Antonio Jacopo Scardigno

THE ROLE OF THE ICT IN PROCESS MONITORING AND SYSTEM IMPACT ASSESSMENT OF RARE DISEASE
COLLABORATIVE NETWORKS (P092)
Paolo Locatelli, Federica Cirilli, Eliana Panno, Salvatore Provenzano, Roberta Sanfilippo and Paolo G. Casali

E-HEALTH: THE WAY TO IMPROVE COORDINATED CARE IN A PRIVATE INSURANCE COMPANY IN
COLOMBIA, 2019 (P098)
Karine Posada, Susana Orrego, Ana M. Ortiz and María M. Yepes

DESIGNING NO-SQL BASED PERSONAL HEALTHCARE DATA EXCHANGE SCHEMA (P114)
Hee Joung Hwang

TELEMONITORING OF USERS WITH PACEMAKERS: INFORMAL CAREGIVERS AT 5 YEARS AFTER IMPLANT
(P146)
Antonio Lopez-Villegas, Remedios Lopez-Liria, Cesar Leal-Costa and Daniel Catalan-Matamoros

11:00-11:30 Coffee Break

11:30-13:00 Session FRP 18.3
IT and Patient Care
(Room: Auditório C302)
Chair: Åsa Smedberg

A NOVEL WEB APPLICATION (FOODOACH) TO MONITOR AND IMPROVE EATING BEHAVIORS: PILOT
RANDOMIZED CONTROLLED TRIAL (F031)
Diana Trojaniello, Francesca Sacchitelli, Elena Massa, Pietro Vismara and Alberto Sanna

“SHARING IS CARING”: DESIGNING A VALUE-SENSITIVE MHEALTH PLATFORM FOR SHARING TYPE 1
DIABETES MANAGEMENT WITHIN FAMILIES (F028)
Elettra Oleari, Clara Pozzi, Francesco Sardu, Francesca Sacchitelli, Virginia Sanchini and Alberto Sanna
(Presented by Diana Trojaniello)

A NOVEL 4-SENSOR SYSTEM FOR FALL DETECTION AND ABNORMAL MEDICAL SITUATIONS
IDENTIFICATION (R057)
Gairat Kuttumuradov, Arslan Mukhamatnurov, Nurmukhamed Tursunbek and Laurent Billonnet

ENERGY MANAGEMENT FOR DEVICES SUPPORTING DEMENTIA PATIENTS (R068)
Diego Silva, Fernando Luís-Ferreira, João Sarraipa and Ricardo Gonçalves

13:00 – 14:30 Lunch Break
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<th>Session/Activity</th>
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<td>14:30-15:30</td>
<td>Session FP 18.4 Management Issues</td>
<td>(Room: Auditório C302) Chair: Gilbert Maiga</td>
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<td>A GENERAL MODEL FOR ASSESSMENT OF CHANGE IN PROFESSIONAL PRACTICES WHILE SHIFTING TO TELE-MEDICINE (F095)</td>
<td>Nathalie Bricon-Souf and Hervé Pingaud</td>
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<td>QUERY PERFORMANCE EVALUATION OVER HEALTH DATA (F137)</td>
<td>Sultan Turhan and Özgün Firarer</td>
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Friday, 19th July 2019

08:15-13:00 Welcome Desk

08:55-11:00 Session FSRP 19.1
IT and Patient Care
(Room: Auditório C302)
Chair: Mário Macedo

SUPPORTING RELAXATION: SLOWBREATHE FOR PEOPLE WITH MYALGIC ENCEPHALOMYELITIS (F047)
Jorun Børsting

USING ICT IN OCCUPATIONAL STRESS MANAGEMENT: THE VIEWS AND EXPERIENCES OF SRI LANKAN STRESS EXPERTS (F120)
Manoja Weerasekara, Åsa Smedberg and Hélène Sandmark

A COMPREHENSIVE STUDY OF IOT FOR ALZHEIMER’S DISEASE (F124)
Roberto Omar Andrade, Sang Guun Yoo and Maria F. Cazares

METHODOLOGY FOR DESIGNING AAL-IOT SOLUTIONS FOR OLDER ADULTS (S069)
Roberto Omar Andrade, Sang Guun Yoo and Jhonattan J. Barriga A.

DESIGN OF NEW GENERATION OF SERIOUS GAMES FOR PATIENTS WITH MODERATE COGNITIVE IMPAIRMENT (R056)
Barbara Carillon, Brune Dirian-Angeli, Gabrièle Breda, Samuel Benveniste and François Deparis

11:00-11:30 Coffee Break

11:30-12:50 Session FSP 19.2
Applications // eHealth Decision Support Systems
(Room: Auditório C302)
Chair: John Gialelis

THE PERFORMANCE OF SOME MACHINE LEARNING APPROACHES IN HUMAN MOVEMENT ASSESSMENT (F118)
Johan Hagelbäck, Pavlo Liapota, Alisa Lincke and Welf Löwe

SEMANTIC INTEGRATION OF MULTIPLE HEALTH DATA FOR TREATMENT DECISION-MAKING (F122)
Olawande Daramola and Thomas Moser

USING ASSOCIATIVE LINKS FOR STORING PERSONALIZED MEDICAL INFORMATION (S060)
Aleksandra Vatian, Anna Rautikova, Aleksey Grantov, Svyatoslav Osipov, Anatoly Shalyto and Natalia Gusarova

12:50 Best Paper Awards Ceremony and Closing Session
(Room: Auditório C302)
Prof. Mário Macedo