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A2: Tutorial 2: Dr. Morcous M. Yassa

Health Care Collaborative Networked Organization

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AAL: The User's Perspective and Architectures

Session Chair: Henrique O'Neill

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Health Technologies for assisting User's daily life

Session Chair: Filipe Sousa

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Introduction to openEHR - Main Concepts, Tools and Archetype/Template Creation

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Designing an Information Accountability Framework for eHealth

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Blanca Borro-Escribano (Complutense University of Madrid, Spain); Angel del Blanco (Universidad Complutense de Madrid, Spain); Baltasar Fernandez-Manjon (Universidad Complutense de Madrid, Spain); Itziar Martinez (National Transplant Organization, Spain); Beatriz Dominguez-Gil (National Transplant Organization, Spain); Rafael Matesanz (National Transplant Organization, Spain)
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Introduction to openEHR - Main Concepts, Tools and Archetype/Template Creation

A9: Tutorial 4: Prof. Tony Sahama

Designing an Information Accountability Framework for eHealth

B4: Workshop 1: International Workshop on New Trends on Telemedicine (NTT 2013)

Panel New Trends On Telehealth / Telemedicine (II)

C4: Workshop 2: First International Workshop on Service Science for e-Health (SSH 2013)

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Maciej Zięba (Wroclaw University of Technology, Poland); Jerzy Świątek (Wroclaw University of Technology, Poland)
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Edyta Winciorek (Military University of Technology (WAT), Poland); Andrzej Walczak (Military University of Technology (WAT), Poland)
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Taufique Sayeed (Universitat Politècnica de Catalunya & CETpD, UPC, Spain); Albert Samà (Universitat Politècnica de Catalunya & CETpD, UPC, Spain); Andreu Catala (Universitat Politècnica de Catalunya, Spain); Joan Cabestany (Universitat Politècnica de Catalunya & CETpD-UPC, Spain)
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Eduardo Metola (Universidad Politécnica de Madrid, Spain); Ana M. Bernardos (Universidad Politécnica de Madrid, Spain); Jose R Casar (Universidad Politécnica de Madrid, Spain)
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B2: Welcome Reception

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Keynote: Marcia Ito (IBM Research Brazil)

The Challenge of Big Data in Health: Meaningful Use of Information for Patient Centered Care

Coffee Break and EXPO Visit

Keynote: Isao Nakajima (Tokai University)

Disaster Communications after the Accidents of the Fukushima Nuclear Power Plant (Japan)

Panel 1: Telemedicine Today

Moderator: Luis Gonçalves

Participants: Portugal - Miguel Castelo Branco (University of Beira Interior, Portugal; Centro Hospitalar Cova da Beira - University Hospital, Covilhã, Portugal) USA-Eric Addeo (DeVry University) Brazil - Cláudio de Souza (State University of Minas Gerais,

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Energy Harvesting Aware Hybrid MAC Protocol for WBANs

Ernesto Ibarra (Telecommunications Technological Centre of Catalonia (CTTC), Spain); Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia (CTTC), Spain); Elli Kartsakli (Universitat Politècnica de Catalunya (UPC), Spain); Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)
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Norbert Noury (University of Lyon & Team Biomedical Sensors, France); Tareq Hadidi (Salman bin Abdulazizi University, Saudi Arabia)
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Bing Zhou (University of Chinese Academy of Sciences, P.R. China); Xianxiang Chen (Institute of Electronics, Chinese Academy of Sciences, P.R. China); Xinyu Hu (University of Chinese Academy of Sciences, P.R. China); Ren Ren (Institute of Electronics, Chinese Academy of Sciences, P.R. China); Xiao Tan (University of Chinese Academy of Sciences, P.R. China); Zhen Fang (Chinese Academy of Science, P.R. China); Shanhong Xia (Institute of Electronics, CAS, P.R. China)
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Medina Hadjem (Université Paris Descartes, France); Osman Salem (University of Paris Descartes, France); Farid Naït-Abdesselam (University of Paris Descartes, France); Ahmed Mehaoua (University of Paris Descartes, France)
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Wenxing Xu (University of Bristol, United Kingdom); Robert J Piechocki (University of Bristol, United Kingdom); Geoffrey Hilton (University of Bristol, United Kingdom)

Experimental Characterization of Low Power Listening in BAN

Stefan Mijovic (University of Bologna, Italy); Andrea Stajkic (DEI, University of Bologna, Italy); Riccardo Cavallari (DEI - University of Bologna, Italy); Chiara Buratti (University of Bologna, Italy)
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A Web-Based Telehealthcare System with Mobile Application and Data Analysis for Diet People

Han-Ping Chen (National Taiwan University, Taiwan); Wei-Hsin Chen (National Taiwan University, Taiwan); Xing-Yu Su (National Taiwan University, Taiwan); Feipei Lai (National Taiwan University, Taiwan); Yi-Ju Chen (National Taiwan University Hospital, Taiwan); Kuo-Chin Huang (National Taiwan University Hospital, Taiwan)
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Integration of Emergency Web App for accessing the emergency services by mobile phones

Carlos Juiz (University of the Balearic Islands, Spain); Beatriz Gomez (University of the Balearic Islands, Spain)
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E-Learning Templates for Peripheral Vascular Stenting

Evanthia Tripoliti (Technical University of Crete, Greece); Ioannis Pappas (Technical University of Crete, Greece); Euripides G.M. Petrakis (Technical University of Crete (TUC), Greece); Josep Maria Sans (NeXTRet, Greece)
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Eriksson Jorge Monteiro (University of Aveiro, Portugal); Carlos Costa (University of Aveiro, Portugal); José Luís Oliveira (University of Aveiro, Portugal)
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CAD systems and e-Learning in radiologists training

César Suárez Ortega (CETA-CIEMAT, Spain); Jose M Franco-Valiente (Spanish National Research Centre for Energy, Environment and Technology (CIEMAT), Spain)
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Chonlatee Khorakhun (Computer Science, University of St Andrews, United Kingdom); Saleem N Bhatti (University of St Andrews, United Kingdom)
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Isabel de la Torre (University of Valladolid, Spain); Borja Martínez-Pérez (University of Valladolid, Spain); Miguel López-Coronado (University of Valladolid, Spain)
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MoSHCA - My Mobile and Smart Health Care Assistant

Arjen Hommersom (Radboud University, The Netherlands); Peter Lucas (Radboud University, The Netherlands); Marina Velikova (Radboud University, The Netherlands); Giso Dal (Radboud University Nijmegen, The Netherlands); Joaquim Bastos (Instituto de Telecomunicações, Portugal); Jonathan Rodriguez (Instituto de Telecomunicações, Portugal); Marleen Germs (Evalan, The Netherlands); Henk Schwietert (Evalan, The Netherlands)
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Carlos Abreu (University of Minho, Portugal); Paulo Mendes (University of Minho, Portugal)
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Luis M. Camarinha-Matos (New University of Lisbon - FCT, Portugal); Filipa Ferrada (New University of Lisbon - FCT, Portugal); Ana Inês Oliveira (New University of Lisbon - FCT & Uninova, Portugal); João Rosas (New University of Lisbon, Portugal); Jorge Monteiro (Conforto em Casa, Lda., Portugal)
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Víctor Torres-Padrosa (Universitat de Girona, Spain); Claudio Gasparini (Universitat de Girona, Spain); Imma Boada (Universitat de Girona, Spain); Jose Luis Marzo (Universitat de Girona, Spain)
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Marinette Bouet (Clermont-Ferrand University, France); Kahina Gani (Clermont-Ferrand University, France); Michel Schneider (Clermont-Ferrand University & LIMOS, France); Farouk Toumani (Clermont-Ferrand University, France)
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Sergio Cicalò (University of Ferrara - Italy, Italy); Matteo Mazzotti (University of Bologna, Italy); Simone Moretti (University of Bologna, Italy); Velio Tralli (University of Ferrara - Italy, Italy); Marco Chiani (University of Bologna, Italy)
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Sucheng Yu (University of Science and Technology of China, P.R. China); Bin Liu (University of Science and Technology of China, P.R. China); Wei Qiao (University of Science and Technology of China, P.R. China); Chi Zhang (University of Science of Technology of China, P.R. China); Chang Wen Chen (State University of New York at Buffalo, USA); Jian Cai (Institute of Microelectronics of the Chinese Academy of Sciences, P.R. China)
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Adrienne Heinrich (Philips Research, The Netherlands); Xin Zhao (Technical University Eindhoven, The Netherlands); Gerard Haan (Philips Research Laboratories, The Netherlands)
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Mercedes Huertas (Barcelona Digital Technology Centre & Barcelona Digital, Spain)
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Sidharth Maheswari (Indian Institute of Technology Guwahati, India); Amit Acharyya (IIT HYDERABAD, India); Pachamuthu Rajalakshmi (Indian Institute of Technology Hyderabad, India); Paolo Puddu (Sapienza University of Rome, Italy); Michele Schiariti (Sapienza University of Rome, Italy)
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Antonio de la Piedra (Vrije Universiteit Brussel (VUB), Belgium); An Braeken (Erasmushogeschool Brussel, IWT, Belgium); Abdellah Touhafi (Vrije Universiteit Brussel, Belgium)
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Juha Partala (University of Oulu, Finland); Niina Keränen (University of Oulu, Finland); Mariella Särestöniemi (University of Oulu, Finland); Matti Hämäläinen (University of Oulu, Finland); Jari

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Tony R Sahama (Queensland University of Technology & IEEE ACM IBS ACS SSAInc HISA, Australia); Leonie R Simpson (Queensland University of Technology, Australia); William B Lane (Queensland University of Technology, Australia)
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David Shin (EE&CS, SEF, QUT, Australia); Tony R Sahama (Queensland University of Technology & IEEE ACM IBS ACS SSAInc HISA, Australia); Randike Gajanayake (Queensland University of Technology, Australia)
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Bruno Meira (Universidade do Minho, Portugal); Filipe de Sá-Soares (Universidade do Minho, Portugal)

CoSeMed - Cooperative and Secure Medical Device Cloud

Andreas Kliem (Technische Universität Berlin, Germany); Odej Kao (TU Berlin, Germany)
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E-Health Support System in University Environment

Toshiyuki Maeda (Hannan University, Japan)
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Stand Up from a Chair with Lesser Body Load: Biomechanical Simulation and Visual Supplement

Asuka Takai (Osaka Prefecture University & Division of Mechanical Engineering, Graduate School of Engineering, Japan); Chihiro Nakagawa (Osaka Prefecture University, Japan); Atsuhiko Shintani (Osaka Prefecture University, Japan); Tomohiro Ito (Osaka Prefecture University, Japan)
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Min Chen (Huazhong University of Science and Technology, P.R. China); Yujun Ma (Huazhong University of Science and Technology, P.R. China); Jialun Wang (Huazhong University of Science and Technology, P.R. China); Dung Mau (Huazhong University of Science and Technology, Wuhan, P.R. China); Enmin Song (Huazhong University of Science & Technology, P.R. China)
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Context-Aware eHealth Information Approach for the Brazilian Primary Healthcare System

Augusto Jose Venancio Neto, Ph. D. (Universidade Federal do Rio Grande do Norte & Centro de Ciências Exatas da Terra, Brazil); Joelias Silva Pinto Júnior (Federal University of Goiás, Brazil); Jose N de Souza (UFC, Brazil); Eduardo Cerqueira (Federal University of Para & UFPA, Brazil)
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WSN4QoL: Wireless Sensor Networks for Quality of Life

Stefano Tennina (WEST Aquila srl, Italy); Elli Kartsakli (Universitat Politècnica de Catalunya (UPC), Spain); Aristeidis Lalos (Technical University of Catalonia (UPC), Spain); Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia (CTTC), Spain); Prodromos-Vasileios Mekikis (Universitat Politècnica de Catalunya (UPC), Spain); Marco Di Renzo (French National Center for Scientific Research (CNRS), France); Yuriy Zacchia Lun (WEST Aquila srl, Italy); Fabio Graziosi (University of l'Aquila, Italy); Luis Alonso (Universidad Politecnica de Catalunya-BarcelonaTECH & Telecommunications and Aerospace Engineering School of Castelldefels, Spain); Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)
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An application of Brain Computer Interface in chronic stroke to improve arm reaching function exploiting Operant Learning strategy and Brain Plasticity

Giulia Cisotto (University of Padova, Italy); Stefano Silvoni (I. R. C. C. S. Foundation San Camillo Hospital, Italy); Francesco Piccione (I. R. C. C. S. Foundation San Camillo Hospital, Italy); Silvano Pupolin (University of Padua, Italy)
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Finn Kuusisto (University of Wisconsin - Madison, USA); Inês Dutra (University of Porto, Portugal); Houssam Nassif (University of Wisconsin - Madison, USA); Yirong Wu (University of Wisconsin - Madison, USA); Molly Klein (University of Wisconsin - Madison, USA); Heather Neuman (University of Wisconsin - Madison, USA); Jude Shavlik (University of Wisconsin-Madison, USA); Elizabeth Burnside (University of Wisconsin - Madison, USA)
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Luís Ribeiro (University of Aveiro, Portugal); Frederico Honório (University of Aveiro, Portugal); José Luís Oliveira (University of Aveiro, Portugal); Carlos Costa (University of Aveiro, Portugal)
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Reliable Vital Sign Collection in Medical Wireless Sensor Networks

Amal Naseem (Paris Descartes University, France); Osman Salem (University of Paris Descartes, France); Yaning Liu (JCP-Consult, France); Ahmed Mehaoua (University of Paris Descartes, France)
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Foteini Andriopoulou (University of Patras, Greece); Konstantinos Birkos (University of Patras, Greece); Dimitrios Lymberopoulos (University of Patras, Greece)
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A Network of Collaborative Sensors for the Monitoring of COPD Patients in their Daily Life

Norbert Noury (University of Lyon & Team Biomedical Sensors, France); Bruno Perriot (University of Lyon & Sleepinnov Technology, France); Jerome Argod (Sleepinnov Yechnology, France); Jean-Louis Pepin (Grenoble University Hospital, Sleep and EFCR & INSERM U1042, HP2 Laboratory, Joseph Fourier University, France)
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An Adaptive Access Control Model for Medical Data in Wireless Sensor Networks

Htoo Aung Maw (University of Hertfordshire, United Kingdom); Hannan Xiao (University of Hertfordshire, United Kingdom); Bruce Christianson (University of Hertfordshire, United Kingdom)
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On Designing an Ubiquitous Sensor Network for Health Monitoring

Bertrand Massot (University of Lyon & INL - INSA Lyon, France); Norbert Noury (University of Lyon & Team Biomedical Sensors, France); Claudine Gehin (INL, France); Eric McAdams (INL, France)
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Radiation Awareness in Three-Dimensional optimal WBAN model deployment

Hassine MOUNGLA (Paris Descartes University & LIPADE Labs, France); Nora Touati (LIX, Ecole Polytechnique, France); Ahmed Mehaoua (University of Paris Descartes, France)
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Comparative Analysis of Indoor Location Technologies for Monitoring of Elderly

Silvia Miguel-Bilbao (Health Institute Carlos III, Spain); Jose Roldan (ISCIII, Spain); Jorge Garcia (Health Institute Carlos III, Spain); Pilar García-Sagredo (ISCIII, Spain); Victoria Ramos (Institute of Health Carlos III, Spain); Fernando López (ISCIII, Spain)

Mitigating the Hospital Area Communication's Interference using Cognitive Radio Networks

Dramane Ouattara (Labri, France); Thao Quach (University Bordeaux 1, France); Francine Krief (University of Bordeaux, France); Mohamed Aymen Chalouf (IRISA Lab - University of Rennes 1, France); Hicham Khalife (Thales Communications & Security, France)

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A Method for Identifying Temporal Progress of Chronic Disease Using Chronological Clustering

Sangjin Jeong (ETRI, Korea); Chan-Hyun Youn (Korea Advanced Institute of Science and Technology, Korea); Yong-Woon Kim (Electronics and Telecommunications Research Institute, Korea)

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Leonardo Gardini (State University of Ceara, Brazil); Reinaldo Bezerra Braga (Federal University of Ceara & GREat, Brazil); José Bringel Filho (University of Evry, France); Rossana Maria de Castro Andrade (Federal University of Ceara, Brazil); Carina Teixeira De Oliveira (Federal University of Ceara (UFC), Brazil); Herve Martin (Université Joseph Fourier, France); Odorico Andrade (UFCE, Brazil); Mauro Oliveira (Centro Federal de Educação Tecnológica do Ceara, Brazil)

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A Pervasive Energy-Efficient ECG Monitoring Approach for Detecting Abnormal Cardiac Situations

Vinicius Bezerra (State University of Piaui - UESPI, Brazil); Misael Junior (State University of Piaui - UESPI, Brazil); Olga Valéria (State University of Piaui - UESPI, Brazil); Constantino Dias Neto (State University of Piaui - UESPI, Brazil); Marcus Lemos (University of Fortaleza, Brazil); Liliam Leal (University of Fortaleza, Brazil); Carlos Giovanni Nunes de Carvalho (State University of Piauí, Brazil); José Bringel Filho (University of Evry, France); Agoulmine Nazim (University of Evry Val d'Essonne, France)

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Using Text Mining to Diagnose and Classify Epilepsy in Children

Luis Pereira (Polytechnic Institute of Leiria, Portugal); Rui Rijo (School of Technology and Management, Polytechnic Institute of Leiria & INESCC - Institute for Systems and Computers Engineering at Coimbra, Portugal); Catarina Silva (University of Coimbra, Portugal); Margarida Agostinha (Hospital Leiria-Pombal, Portugal)

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G3: S8: Signal processing/Telemedicine

Telecardiology: Hurst Exponent based Anomaly Detection in Compressively Sampled ECG Signals

Bollepalli S Chandra (Indian Institute of Technology Hyderabad, India); S. Sastry Challa (IIT Hyderabad, India); Soumya Jana (Indian Institute of Technology, Hyderabad, India)

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Discrete-Wavelet-Transform-Based Noise Reduction and R Wave Detection for ECG Signals

Hsin-Yi Lin (National Tsing Hua University, Taiwan); Sz-Ying Liang (National Tsing Hua University, Taiwan); Yi-Lwun Ho (National Taiwan University Hospital, Taiwan); Yen-Hung Lin (National Taiwan University Hospital, Taiwan); Hsi-Pin Ma (National Tsing Hua University, Taiwan)

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Shingo Tsukada (NTT Basic Research Laboratories, Japan); Nahoko Kasai (NTT Basic Research Laboratories, Japan); Hiroshi Nakashima (NTT Basic Research Laboratories, Japan); Koji Sumitomo (NTT Basic Research Laboratories, Japan)

Context-aware Low-energy Wi-Fi Sensor Networks for e-Health

Luis Miguel Carvalho (Faculdade de Engenharia de Universidade do Porto, Portugal); Rui Lopes Campos (INESC TEC, Portugal); Manuel Pereira Ricardo (Universidade do Porto, Portugal)

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On Asynchronous Flow Scheduling for Wireless Body Sensor Networks

Liang Zhou (Nanjing University of Posts and Telecommunications, P.R. China); Jianxin Chen (Nanjing University of Posts&Telecommunications, P.R. China); Baoyu Zheng (Nanjing University of Posts and Telecommunications, P.R. China); Isabel de la Torre (University of Valladolid, Spain); Sudip Misra (Indian Institute of Technology-Kharagpur, India)
pp. 366-370

Catastrophic Collision in Bio-nanosensor Networks: Does it really matter?

Nabiul Islam (Indian Institute of Technology Kharagpur, India); Sudip Misra (Indian Institute of Technology-Kharagpur, India); Judhistir Mahapatro (Indian Institute of Technology Kharagpur, India); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal)
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G4: S9: Services and Standards

Healthcare professionals as customers: A service perspective on Portuguese primary care health information systems

Jorge Grenha Teixeira (University of Porto - Faculty of Engineering, Portugal); Lia Patrício (University of Porto, Portugal); Leonel Nóbrega (University of Madeira, Portugal); Larry Constantine (University of Madeira, Portugal); Raymond Fisk (Texas State University, USA)
pp. 377-381

Norms and Standards in Modular Medical Architectures

Christoph P Thuemmler (Edinburgh Napier University, United Kingdom); Oli Mival (Edinburgh Napier University, United Kingdom); David Benyon (Edinburgh Napier University, United Kingdom); William J Buchanan (Edinburgh Napier University, United Kingdom); Alois Paulin (Edinburgh Napier University, United Kingdom); Samuel Fricker (Blekinge Institute of Technology, Sweden); Markus Fiedler (Blekinge Institute of Technology, Sweden); Bert-Jaap Koops (Tilburg University, The Netherlands); Eleni Kosta (Tilburg University, The Netherlands); Astrid Grottnland (University Hospital of North Norway, Norway); Armin Schneider (TU München & Klinikum Rechts der Isar der TU München, Germany); Thomas Jell (Siemens, Germany); Anastasius Gavras (Eurescom GmbH, Germany); Maria Barros (Eurescom GmbH, Germany); Thomas Magedanz (TU Berlin / Fraunhofer FOKUS, Germany); Philippe Cousin (eGlobalMark, France); Ioana Ispas (Ministry of National Education, Bucharest, Romania); Euripides G.M. Petrakis (Technical University of Crete (TUC), Greece)
pp. 382-387

eHealth Complex Services Require Holistic Design

Nelson Pinho (University of Porto, Portugal); Lia Patrício (University of Porto, Portugal); Raymond Fisk (Texas State University, USA)

The Role of Perceived Usefulness and Attitude on Electronic Health Record Acceptance

Randike Gajanayake (Queensland University of Technology, Australia); Tony R Sahama (Queensland University of Technology & IEEE ACM IBS ACS SSAInc HISA, Australia); Renato Iannella (Queensland University of Technology, Australia)
pp. 388-393

Interoperability in Ambient Assisted Living Using OpenEHR

Eduardo Osório (Fraunhofer Portugal Research Center for Assistive Information and Communication Solutions, Portugal); Liliana Ferreira (Fraunhofer Portugal AICOS, Portugal); Rui Abreu (Faculty of Engineering, University of Porto, Portugal); Filipe Sousa (Fraunhofer Portugal, Portugal)
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Analyzing open-source and commercial EHR solutions from an international perspective

Isabel de la Torre (University of Valladolid, Spain); Borja Martínez-Pérez (University of Valladolid, Spain); Miguel López-Coronado (University of Valladolid, Spain)
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G5: S10: Applications and system development for eHealth

Control and Personalization Approach for an ICT-enabled Wearable Artificial Kidney

Lukas Pielawa (OFFIS, Germany); Torben Wallbaum (OFFIS - Institute for Information Technology, Germany); Melina Frenken, (born Brell) (OFFIS Institut für Informatik Oldenburg, Germany); Andreas Hein (Universität Oldenburg, Germany)
pp. 404-408

Development of a Real-Time Vital Data Collection System from Players during a Football Game

Shinsuke Hara (Osaka City University, Japan); Tetsuo Tsujioka (Osaka City University, Japan); Tōji Kanda (Osaka City University, Japan); Hajime Nakamura (Osaka City University, Japan); Takashi Kawabata (Kansai University, Japan); Kenji Watanabe (SYNTHESIS Corporation, Japan); Masanao Ise (SYNTHESIS Corporation, Japan); Noa Arime (SYNTHESIS Corporation, Japan); Hiroyuki Okuhata (Synthesis Corporation, Japan)
pp. 409-413

IntellWheels: intelligent wheelchair with user-centered design

Marcelo R Petry (INESC TEC and University of Porto, Portugal); António Moreira (Fac. Eng. da Universidade do Porto, Portugal); Brigida Monica Faria (ESTSP, Polytechnic Institute of Porto and IEETA, University of Aveiro, Portugal); Luis Paulo Reis (DSI/EEUM, University of Minho, Portugal)
pp. 414-418

A System for Assessment of Limb Movements in Sleep

Adriana Adami (University of Caxias do Sul, Brazil); André G Adami (University of Caxias do Sul, Brazil); Zachary Beattie (Oregon Health and Science University, USA); Tamara Hayes (Oregon Health and Science University, USA)
pp. 419-423

Linear Time-Invariant System Based Assessment Model for Coronary Heart Disease

Zening Qu (Tsinghua University & Tsinghua University, P.R. China); Lyu Yongqiang (Tsinghua University, P.R. China); Yida Tang (Fuwai Hospital, P.R. China); Wenyao Wang (Fuwai Hospital, P.R. China); Zihan Wang (Tsinghua University, P.R. China); Jiaming Hong (Tsinghua University, P.R. China); Agoulmine Nazim (University of Evry Val d'Essonne, France)
pp. 424-428

TeleMDID: Mobile Technology Applications for Interactive Diagnoses in TeleDermatology Clinics

Mirna Becevic (University of Missouri & Missouri Telehealth Network, USA); Blake Anderson (University of Missouri, USA); Jing Ginger Han (University of Missouri, USA); E. Rachel Mutrux (Missouri Telehealth Network, USA); Karen Edison (University of Missouri, USA); Lanis L Hicks (University of Missouri & School of Medicine, USA); Chi-Ren Shyu (University of Missouri, USA)
pp. 429-433

G6: S11: Applications

ARPEGE: Assessment of Frailty at Home

Rana Jaber (Université de Technologie de Troyes, France); Aly Chkeir (University of Technology of Troyes, France); David Hewson (Université de Technologie de Troyes, France); Jacques Duchêne (Université de Technologie de Troyes, France)
pp. 434-438

Fall Detection on the Road

Felix Büsching (Technische Universität Braunschweig, Germany); Henning Post (Technische Universität Braunschweig, Germany); Matthias Gietzelt (PLRI, Germany); Lars C Wolf (Technische Universität Braunschweig, Germany)
pp. 439-443

KiReS: A Kinect-based telerehabilitation system

David Antón (University of the Basque Country UPV/EHU, Spain); Alfredo Goñi (University of the Basque Country, Spain); Arantza Illarramendi (University of the Basque Country, Spain); Juan José Torres-Unda (University of the Basque Country UPV/EHU, Spain); Jesús Seco (University of León, Spain)
pp. 444-448

A Portable Spatial Monitoring System for Autonomous Heart Diagnosis

António Meireles (GECAD & IEETA, Portugal); Lino Figueiredo (ISEP Institute of Engineering of Porto, Portugal); Luís Lopes (IEETA, Portugal)
pp. 449-453

RehabNet: A Distributed Architecture for Motor and Cognitive Neuro-Rehabilitation

Athanasios Vourvopoulos (Madeira Interactive Technologies Institute & University of Madeira, Portugal); Ana Lúcia Faria (Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra & Madeira Interactive Technologies Institute, Portugal); Mónica Cameirão (Madeira Interactive Technologies Institute, Portugal); Sergi Bermúdez i Badia (Universidade da Madeira, Portugal)
pp. 454-459

OSHC0: A Cross-Domain Ontology for Semantic Interoperability Across Medical and Oral Health Domains

Tejal Manojkumar Shah (University of New South Wales, Australia); Fethi Rabhi (University of New South Wales, Australia); Pradeep Kumar Ray (University of New South Wales, Australia)
pp. 460-464

F1: Conference Banquet

H1: Keynote: Prof. Henrique Martins (Faculty of Health Sciences, Universidade da Beira Interior)

eHEALTH in Europe

H2: Keynote: Dr.-Ing. Heike Vallery (TU Delft)

Transparent Robot-Assisted Gait Training in Neurorehabilitation

H3: Coffee Break and EXPO Visit

I1: S12: Cloud for eHealth

What challenges have to be faced when using the cloud for e-health services?

Fei Liu (Leiden University, The Netherlands); Eric Rijnboutt (Leiden University, The Netherlands); Dimitrios Routsis (Leiden University, The Netherlands); Nicolaas Venekamp (Leiden University, The Netherlands); Harry Fulgencio (Leiden University, The Netherlands); Mohsen Rezai (Leiden University, The Netherlands); Adriaan van der Helm (Leiden University, The Netherlands)
pp. 465-470

Activity recognition and resource optimization in mobile cloud through MapReduce

Shujaat Hussain Kausar (KyungHee University Suwon, Korea); Muhammad Bilal Amin (Kyung Hee University, Korea); JaeHun Bang (KyungHee University Suwon, Korea); Manhyung Han (Kyung Hee University, Korea); Sungyoung Lee (Kyung Hee University, Korea); Chris Nugent (University of Ulster, United Kingdom); Sally I McClean (University of Ulster, Coleraine, United Kingdom); Bryan W. Scotney (University of Ulster, United Kingdom); Gerard P. Parr (University of Ulster, United Kingdom)
pp. 471-475

A Distributed Storage Solution for Cloud Based e-Healthcare Information System

Weider D. Yu (San Jose State University, USA); Manjula Kollipara (San Jose State University, USA); Roopa Penmetsa (San Jose State University, USA); Sumalatha Elliadka (San Jose State University, USA)
pp. 476-480

Mapping of Sensor Nodes with Servers in a Mobile Health-Cloud Environment

Snigdha Das (Indian Institute of Technology-Kharagpur, India); Sudip Misra (Indian Institute of Technology-Kharagpur, India); Manas Khatua (SIT, IIT Kharagpur, India); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal)
pp. 481-485

Fault- and Disaster-Resistant Medical Cloud System for Various Medical Applications

Yasushi Hirano (Yamaguchi University, Japan); Nobuya Negishi (Kozo Keikaku Engineering Inc., Japan); Yoshiyuki Ipposhi (Kozo Keikaku Engineering Inc., Japan); Junichi Yamaguchi (Kozo Keikaku Engineering Inc., Japan); Noboru Sonehara (National Institute of Informatics, Japan); Shu Kuramoto (Kochi Organization for Medical Reformation and Renewal, Japan); Tsutomu Sawada (Kochi Health Sciences Center, Japan)
pp. 486-490

I2: S13: Sensors for Healthcare applications

Ultra Low-Power Smart Medical Sensor Node for In-Body Biomonitoring

Maykel Alonso-Arce (Centro de Estudios e Investigaciones Técnicas, Spain); Jon Legarda (Deusto Institute of Technology, Spain); Beatriz Sedano (CEIT, Spain); Paul Bustamante (CEIT, Spain)
pp. 491-496

Ultra-Compact Bird-Borne S-band Transceiver Aiming to Search Low Pathogenic Avian Influenza

Isao Nakajima (Tokai University School of Medicine, Japan); Leonid Androuchko (International University Geneva, Switzerland); Toshihiko Kitano (Tokai University, Japan); Kaoru Nakada (Tokai University, Japan); Masaaki Katayama (Nagoya University, Japan)
pp. 497-501

A Multi-Sensor Surveillance System for Elderly Care

Bassant Selim (Khalifa University, UAE); Youssef Iraqi (Khalifa University, UAE); Ho-Jin Choi (Korea Advanced Institute of Science and Technology (KAIST), Korea)
pp. 502-506

A Low Noise Wearable Wireless ECG System with Body Motion Cancellation for Long Term Homecare

Yishan Wang (RWTH Aachen University & Chair of Integrated Analog Circuit and RF-System, Germany); Ralf Wunderlich (RWTH Aachen University, Germany); Stefan Heinen (RWTH Aachen, Germany)
pp. 507-511

Embedded Implementation of Modular Closed-Loop Control of Diabetes and In Silico Validation

Maurizio Gentili (STMicroelectronics & Scuola Superiore Sant'Anna, Italy); Caltabiano Daniele (STMicroelectronics, Italy); Roberto Sannino (STMicroelectronics, Italy); Chiara Toffanin (University of Pavia, Italy); Federico Di Palma (University of Pavia, Italy); Lalo Magni (University of Pavia, Italy); Stephen Lane (Triteq Ltd, United Kingdom)
pp. 512-517

Biometric Recognition System Using Low Bandwidth ECG Signals

André Matos (Instituto Superior de Engenharia de Lisboa, Portugal); Andre R. Lourenço (Instituto Superior de Engenharia de Lisboa, Portugal); José Nascimento (Instituto Superior de Engenharia de Lisboa and Instituto de Telecomunicações, Portugal)
pp. 518-522

I3: S14: Smart eHealth

Consumer Engagement with eHealth Information through Smartphones and Tablets

Lynda Andrews (Queensland University of Technology, Australia); Randike Gajanayake (Queensland University of Technology, Australia); Tony R Sahama (Queensland University of Technology & IEEE ACM IBS ACS SSAInc HISA, Australia)
pp. 523-528

A Smartphone-Based Fall Risk Assessment Tool: Measuring One Leg Standing, Sit to Stand and Falls Efficacy Scale

Vânia Guimarães (Fraunhofer Portugal AICOS, Portugal); David Ribeiro (Fraunhofer Portugal AICOS, Portugal); Luís Rosado (Fraunhofer Portugal AICOS, Portugal)
pp. 529-533

Localization with WLAN on Smartphones in Hospitals

Chien-Hsing Lu (National Tsing Hua University Hsinchu, Taiwan); Hsuan-Hung Kuo (National Tsing Hua University, Taiwan); Cheng-Wei Hsiao (National Tsing Hua University, Taiwan); Yi-Lwun Ho (National Taiwan University Hospital, Taiwan); Yen-Hung Lin (National Taiwan University Hospital, Taiwan); Hsi-Pin Ma (National Tsing Hua University, Taiwan)
pp. 534-538

Body movement analysis during sleep based on video motion estimation

Adrienne Heinrich (Philips Research Laboratories, The Netherlands); Xavier Louis Aubert (Philips Research Laboratories Europe, Germany); Gerard Haan (Philips Research Laboratories, The Netherlands)
pp. 539-543

Wireless Solutions for Improving Health and Safety Working Conditions in Industrial Environments

Jose Antonio Palazón Selva (Universidad Miguel Hernández de Elche, Spain); Javier Gozalvez (Universidad Miguel Hernandez de Elche, Spain); Juan Maestre (Universidad Miguel Hernandez de Elche, Spain); Jose Ramon Gisbert (Universidad Miguel Hernandez de Elche, Spain)
pp. 544-548

Activity Classification using a SmartPhone

Francisco João Duarte (Instituto Superior de Engenharia de Lisboa, Portugal); Andre R. Lourenço (Instituto Superior de Engenharia de Lisboa, Portugal); Arnaldo J. Abrantes (Instituto Superior Engenharia de Lisboa, Portugal)
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I4: S15: Mobile Health

Reducing Adolescent Obesity with a Mobile Fitness Application: Study Results of Youth Age 15 to 17

Fletcher Lu (University of Ontario Institute of Technology, Canada)
pp. 554-558

A Multi-Communication-Fusion Based Mobile Monitoring System for Maternal and Fetal Information

Pei Lyu (Hunan University, P.R. China); Manman Peng (Hunan University, P.R. China); Lyu Yongqiang (Tsinghua University, P.R. China); Yu Chen (Tsinghua University, P.R. China); Jijiang Yang (Tsinghua University, P.R. China)
pp. 559-563

Digital Signature of Network Segment using PCA, ACO and Holt-Winters for Network Management

Luiz F. Carvalho (State University of Londrina, Brazil); Marcos V. O. de Assis (State University of Londrina, Brazil); Gilberto Fernandes, Jr. (State University of Londrina, Brazil); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal); Mario Lemes Proença Jr. (State University of Londrina, Brazil)
pp. 564-568

A Software Model of Mobile Notification System for Medication Misuse Prevention

Petar Rajkovic (University of Nis, Serbia); Dragan Jankovic (University of Nis, Serbia); Aleksandar Milenkovic (University of Nis, Serbia)
pp. 569-574

Electrochemical Detection of Arsenic via a Microfluidic Sensor and Mobile Interface towards Affordable, Rapid, and Point-of-Use Water Monitoring

Unyoung Kim (Santa Clara University, USA); Benjamin Demaree (Santa Clara University, USA); Jessica VanderGiessen (Santa Clara University, USA); Mary Reynolds (Santa Clara University, USA); Kyle Perricone (Santa Clara University, USA); John Seubert (Santa Clara University, USA); Zuhayr Elahi (Santa Clara University, USA); Sonny Gandhi (Santa Clara University, USA); Shoba Krishnan (Santa Clara University, USA); Silvia Figueira (Santa Clara University, USA)
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STAlz: remotely supporting the diagnosis, tracking and rehabilitation of patients with Alzheimer's

Hélder Moreira (Associação Fraunhofer Portugal Research, Portugal); Nuno Flores (University of Porto, Portugal); Renato Oliveira (Associação Fraunhofer Portugal Research, Portugal); Vânia Guimarães (Fraunhofer Portugal AICOS, Portugal)
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I5: Demos

I6: Lunch Break

K1: S16: AAL

A Testing and Certification Methodology for an Ambient-Assisted Living Ecosystem

João Pascoal Faria (University of Porto - Faculty of Engineering, Portugal); Bruno Lima (University of Porto - Faculty of Engineering & INESC TEC, Portugal); Tiago Boldt Sousa (INESC TEC & University of Porto - Faculty of Engineering, Portugal); Angelo Martins (Instituto Superior de Engenharia do Porto, Portugal)
pp. 585-589

Automatic fall detection: complementary devices for a better fall monitoring coverage

Pierre Barralon (Tecnalia Research & Innovation, Spain); Inigo Dorronsoro (Tecnalia Research & Innovation, Spain); Erik Hernandez (Tecnalia Research & Innovation, Spain)
pp. 590-593

Real Time Falls Prevention and Detection with Biofeedback Monitoring Solution for Mobile Environments

Edgar Horta (Instituto de Telecomunicações, University of Beira Interior, Portugal); Ivo Lopes (Instituto de Telecomunicações, University of Beira Interior, Portugal); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal); Sudip Misra (Indian Institute of Technology-Kharagpur, India)
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An approach for the Management of an AAL Ecosystem

Ana Inês Oliveira (New University of Lisbon - FCT & Uninova, Portugal); Filipa Ferrada (New University of Lisbon - FCT, Portugal); Luis M. Camarinha-Matos (New University of Lisbon - FCT, Portugal)
pp. 601-605

Non-Intrusive Human Activity Monitoring in a Smart Home Environment

Mohsen Amiri (University of British Columbia & Sharif University of Technology, and Simon Fraser University, Canada); Mahsa T. Pourazad (TELUS Communications Company, Canada); Panos Nasiopoulos (University of British Columbia, Canada); Victor CM Leung (The University of British Columbia, Canada)
pp. 606-610

Real-Time Physiological Stream Processing for Health Monitoring Services

Lawrence Chow (Stanford University, USA); Nicholas Bambos (Stanford University, USA)
pp. 611-616

K2: S17: CDSS

Clinical-based Prediction of Side Effects in Colon Cancer Chemotherapy

Mouna Kacimi (Free University of Bozen-Bolzano, Italy); Ognjen Savkovic (Free University of Bozen-Bolzano, Italy); Manfred Mitterer (Hospital Franz Tappeiner, Italy)
pp. 617-621

Application of Support Vector Machine and k-means Clustering Algorithms for Robust Chronic Lymphocytic Leukemia Color Cell Segmentation

Emad Mohammed (University of Calgary, Schulich School of Engineering Electrical and Computer Dept., AB, Canada, Canada); Mostafa Mohamed A. Mohamed (Helwan University, Egypt); Christopher Naugler (University of Calgary and Calgary Laboratory Services Calgary, Canada); Behrouz Homayoun Far (University of Calgary, Canada)
pp. 622-626

Meta-classifier for Type 2 Diabetes Mellitus comorbidities in Colombia

Angela Franco (Universidad Nacional de Colombia, Colombia); Elizabeth León (Universidad Nacional de Colombia, Colombia)
pp. 627-631

A Bag-of-Tasks Approach to Speed Up the Lung Nodules Retrieval in the BigData age

Marcelo Oliveira (Federal University of Alagoas (UFAL), Brazil); José Ferreira, Jr (Federal University of Alagoas & Computing Institute, Brazil)
pp. 632-637

Profile-based System for Nutritional Information Management

Catarina Silva (University of Coimbra, Portugal); Rui Costa (Polytechnic Institute of Leiria, Portugal); Luís Marcelino (Polytechnic Institute of Leiria, Portugal)
pp. 638-642

Smartphone Based Fall Prevention Exercises

Bruno Ferreira (Fraunhofer Portugal - AICOS, Portugal); Vânia Guimarães (Fraunhofer Portugal AICOS, Portugal); Hugo Ferreira (Faculty of Engineering of the University of Porto, Portugal)
pp. 643-648

K3: S18: Knowledge acquisition

Diversifying Medical Search Results

Chunchen Liu (NEC Laboratories, P.R. China); Jianqiang Li (NEC Laboratories, P.R. China); Bo Liu (NEC Laboratories, P.R. China)

Unsupervised Graph-based Word Sense Disambiguation of Biomedical Documents

Wessam Gad El-Rab Gad El-Rab (University of Alberta, Canada); Osmar Zaiane (University of Alberta, Canada); Mohammad El-Hajj (MacEwan University, Canada)
pp. 649-652

Abdominal Morphometric Data Acquisition Using Depth Sensors

Sylvia Pötin (University of Reims, France); Aassif Benassarou (University of Reims, France); Frédéric Blanchard (University of Reims, France); Olivier Nocent (University of Reims Champagne-Ardenne & CRESTIC, France)
pp. 653-657

Towards Automated Self-tagging in Emergency Health Cases

Fasee Ullah (Umm Al-Qura University, Saudi Arabia); Abdelmajid Khelil (Huawei European Research Center, Germany); Adil A Sheikh (Umm Al-Qura University, Saudi Arabia); Emad Felemban (Umm Al Qura University, Saudi Arabia); Hattan Bojan (Ministry of Health, Saudi Arabia)
pp. 658-663

Differences in Internet Usage Patterns with Stress and Anxiety among College Students

Sriram Chellappan (Missouri University of Science and Technology, USA); Levi Malott (Missouri S&T, USA); Sai Preethi Vishwanathan (Missouri S&T, USA)
pp. 664-668

The Virtue of Sharing: Efficient Content Delivery in Wireless Body Area Networks for Ubiquitous Healthcare

Min Chen (Huazhong University of Science and Technology, P.R. China); Dung Mau (Huazhong University of Science and Technology, Wuhan, P.R. China); Xiaofei Wang (Seoul National University, Korea); Honggang Wang (University of Massachusetts, Dartmouth & College of Engineering, USA)
pp. 669-673

K4: S19: Image & 3D Models

Classification of Retinal Image for Automatic Cataract Detection

MeiMei Yang (Beijing University of Posts and Telecommunications, P.R. China); Jijiang Yang (Tsinghua University, P.R. China); Qinyan Zhang (Beijing University of Posts and Telecommunications, P.R. China); Yu Niu (Tsinghua University, P.R. China); Jianqiang Li (NEC, P.R. China)
pp. 674-679

Quality Evaluation of Asymmetric Compression for 3D Surgery Video

Chaminda T. E.R. Hewage (University of Kingston, United Kingdom); Harsha Appuhami (Kingston University-London, United Kingdom); Maria G. Martini (Kingston University, United Kingdom); Ralph Smith (MATTU, United Kingdom); Iain Jourdan (MATTU, United Kingdom); Timothy Rockall (Surrey University, United Kingdom)
pp. 680-684

Comparing Limb-Volume Measurement Techniques: 3D Models from an Infrared Depth Sensor versus Water Displacement

Guannan Lu (University of Missouri, USA); Guilherme N. DeSouza (University of Missouri-Columbia, USA); Jane Armer (University of Missouri, USA); Chi-Ren Shyu (University of Missouri, USA)
pp. 685-691

A Framework toward Detecting and visualizing Kinematic Data for Children with Hemiplegia

Md. Abdur Rahman (Umm Al-Qura University, Saudi Arabia); Saleh Basalamah (Umm Al-Qura University, Saudi Arabia); Asad Toonsi (MCH - Makkah, Saudi Arabia); Abdulmotaleb El Saddik (University of Ottawa, Canada)
pp. 692-696

An Improved Digital Pain Body Map

Ellen Jaatun (NTNU & St Olav University Hospital, Norway); Dagny Haugen (NTNU, Norway); Yngve Dahl (SINTEF, Norway); Anders Kofod-Petersen (SINTEF, Norway)
pp. 697-701

A Skillet-Based Recoloring Algorithm for Dichromats

Madalena Ribeiro (University of Beira Interior, Portugal); Abel Joao Gomes (Universidade da Beira Interior, Portugal)
pp. 702-706

K5: Poster Session 2

A cloud based architecture for medical imaging services

Carlos Viana-Ferreira (University of Aveiro, Portugal); Carlos Costa (University of Aveiro, Portugal)
pp. 707-709

Towards Design of Technologies Persuading more Physical Activity

Yao Meng (Inje University, Korea); Hee-Cheol Kim (Inje University, Korea)
pp. 710-715

Active Protection of Patient Data by Reverse Cloud Approach

Tom Pfeifer (Technische Universität Berlin, Germany); Stefan Covaci (Technische Universität Berlin, Germany)
pp. 716-718

Fall Risk Assessment by means of a pocket size screening tool: preliminary results

Andrea Cattabriga (University of Bologna, Italy); Marco Corbelli (University of Bologna, Italy); Sabato Mellone (University of Bologna, Italy); Chiara Mussi (University of Modena, Reggio Emilia, Italy); Lorenzo Chiari (University of Bologna, Italy)

Automatic Verification of Health Regulatory Compliance in Cloud Computing

Khaled Md Khan (Qatar University, Qatar); Yun Bai (University of Western Sydney, Australia)
pp. 719-721

Design of adaptive IEEE 802.11 WLAN in hospital environments

Sunghwa Son (Daegu Gyeongbuk Institute of Science & Technology, Korea); Kyung-Joon Park (DGIST, Korea); Eun-Chan Park (Dongguk University, Korea)

Promoting a Healthy Lifestyle: Towards an Improved Personalized Feedback Approach

Reinoud Achterkamp (Roessingh Research and Development, The Netherlands); Miriam Cabrita (Roessingh Research and Development, The Netherlands); Harm op den Akker (Roessingh Research and Development, The Netherlands); Hermie Hermens (University of Twente, The Netherlands); Miriam Vollenbroek-Hutten (Roessingh Research and Development, The Netherlands)
pp. 725-727

Exploring nanopublications integration in pharmacovigilance scenarios

Pedro Sernadela (University of Aveiro, Portugal); Pedro Lopes (University of Aveiro, Portugal); José Luís Oliveira (University of Aveiro, Portugal)
pp. 728-730

MonitorMe: Online Video Monitoring for First Responders Using a Smartphone

Ana P. Rocha (University of Aveiro, Portugal); Oscar Pereira (IEETA, University of Aveiro, Portugal); David Ribeiro (IEETA, University of Aveiro, Portugal); José Maria Fernandes (University of Aveiro & IEETA, Portugal); Joao Silva Cunha (University of Aveiro, Portugal)
pp. 731-733

Low-cost nationwide medical imaging storage

Ariel Sabiguero (Instituto de Computación - UDELAR, Uruguay)
pp. 734-736

An Intelligent Medicine Cabinet Proposed to Increase Medication Adherence

Claudio E. M. Gomes (Universidade Federal do Amazonas, Brazil); Farzan Yazdi Motlagh (University of Stuttgart, Germany); Vicente Lucena Jr (University of Amazonas, Brazil); Peter Göhner (University of Stuttgart, Germany)
pp. 737-739

K6: Meeting: IEEE Comsoc TC on Health

K7: Coffee Break and EXPO Visit

K8: Panel 2: Cloud or not to Cloud for eHealth (Cisco)

Moderator: Masum Z Hasan

Participants: Monique Morrow (CTO, Cisco Service); Nazim AGOULMINE (University of Evry, France); Gerard Parr (University of Ulster, UK); Benjamin Hirsch (BT-Etisalat Innovation Center, Abu Dhabi, UAE)

K9: Organiser/Volunteers Recognition Meeting

L1: Welcome

Welcome - Henrique Martins (Chairmen of the Board, SPMS; University of Beira Interior, Portugal), Helena Monteiro (Operation Co-Chair; ISCSP, UL, Portugal)

L2: Medicine in 2020

António Murta (Pathena Group, President)

L3: The Governance of the NHS with new management tools (Activity Based Cost)

Ana Paula Harfouche, (IPO and ISCSP, UL, Portugal)

L4: Facilitators and Inhibitors in Hospital Management in Portugal

Francisco Velez Roxo (Hospital Center of Leiria Pombal and Catholic University, Portuga)

L5: Coffee Break and EXPO Visit

L6: Panel 1

Moderador - Adalberto Campo Fernandes (Presidente SAMS President and National Public Health School)

L7: Keynote

SNS systems and infrastructures - Arquitetura e Governance - Henrique Martins (Chairmen of the Board, SPMS, Portugal; University of Beira Interior, Portugal)

L7: Closing Session

Paulo Macedo, Portuguese Minister of Health & Joel Rodrigues (General Chair, Instituto de Telecomunicações, University of Beira Interior, Portugal)

L8: Half-day Tours