Workshop on Interdisciplinary Research on E-Health Systems and Services IREHSS 2009

Program

Message from the Workshop Chairs

Workshop Organization

Keynote abstract

Opening Remarks (9.00 – 9.15)

Paul Lukowicz

Keynote Lecture (9.15 – 10.15)

Wearable Physiological Sensing Systems: Issues and Trade-offs in Real World Deployments
Presented by
Jennifer Healey PhD., Intel Corporation, Corporate Technology Group

Session 1: Communication systems for e-health (10.15 – 10.35)

Session Chair: TBD

Managing Change: Experiences from a New e-Health Initiative for Patients with Diabetes and Cardiovascular Disease
Salys Sultan, Permanand Mohan and Nazeer Sultan

Session 2: Sensor-based systems and applications for E-Health (11.00 – 12.30)

Session Chair: TBD

Finite Element Study for Intra and Postarthroplastic Evaluation of Ligament Balancing in Standing Position Using Instrumented Tibial Baseplate
Shaban Almouahed, Manuel Gouriou, Chafiaâ Hamitouche, Eric Stindel and Christian ROUX

Virtual reality implementation as a useful software tool for e-health
Giovanni Saggio, Giuseppe Latessa, Fabio De Santis, Luigi Bianchi, Lucia Rita Quitadamo, Maria Grazia Marciani and Franco Giannini

Mechanical modeling of bend sensors exploited to measure human joint movements
Giuseppe Latessa, Giovanni Saggio, Paolo Bisegna and Stefano Bocchetti

Session 3: Body Area Network (14.00 – 15.30)

Session Chair: Daniele Puccinelli, Universiti of Applied Sciences of Southern Switzerland

Towards an Energy Saving MAC for Wireless Body Sensor Networks
Begonya Otal, Luis Alonso and Christos Verikoukis

Securing Wireless Communication with Implanted Medical Devices using Reciprocal Carrier-Phase Quantization
Gill Tsouri

Distributed decision for medical alerts using wireless sensors
Nathalie Dessart, Hacene Fouchal, Philippe Hunel, Harry Gros-Desormeaux and Nicolas Vidot

Using Relay Network to Increase Life time in Wireless Body Area Sensor Networks
Aida Ehyaie, Masoud Reza Hashemi and Pejman Khadivi

Session 4: Medical data analysis and management (16.00 – 16.45)

Session Chair: TBD

Comparison of two different classifiers for mental tasks-based Brain-Computer Interface: MLP Neural Networks vs. Fuzzy Logic
Giovanni Saggio, Pietro Cavallo, Alessio Ferretti, Francesco Garzoli, Lucia Rita Quitadamo, Maria Grazia Marciani, Franco Giannini and Luigi Bianchi

Computation time analysis of the FastICA algorithm for real-time decomposition of EEG signals.
Stefania Di Giacomo, Gian Carlo Cardarilli, Francesco Altamura and Paolo Altamura