



January 4-7, 2011, The Grand Hyatt Kauai Resort & Spa, Koloa, Kauai, Hawaii.

## **Track: Information Technology in Healthcare**

### **Minitrack: IT Architecture and Applications in Healthcare Environments**

We invite papers that address IT applications in healthcare environments, which range from the management, communication, social collaboration and dissemination of data and information across healthcare systems to pervasive healthcare settings and intelligent, programmable and ubiquitous computing healthcare environments.

Specific topics of interest may include:

#### 1. Integrated solutions in healthcare:

- Heterogeneities, architectures and frameworks in healthcare systems.
- Complexities, challenges and advances in sharing data and practices across healthcare: implications for electronic health records and the management of patient information; availability of clinical and demographic data from primary and secondary care.
- Communicating health-related data: e-prescriptions, referral and discharge letters, clinical summaries, laboratory transactions and results reporting; integrated data for multimedia presentations / intercommunications between medical devices and healthcare systems; disseminating data to healthcare professionals and professional caregivers.
- Sharing data and information for public health protection and their exchange across diverse health systems; accessibility, transparency and extraction of patient individual and aggregate data across primary care, clinical and public healthcare domains.
- Healthcare COTS, freeware, shareware and OSS products' identification, selection and their use in healthcare systems.

#### 2. Pervasive healthcare applications:

- Pervasive healthcare applications: integrating devices in ubiquitous healthcare environments; service oriented software solutions across heterogeneous healthcare systems; context and preference modelling.
- Intelligent healthcare systems: ontologies for knowledge and data sharing in healthcare; programmable pervasive spaces in healthcare; personalisation and context awareness in intelligent healthcare environments.

- Examples of applications of pervasive healthcare: from supporting cognitive behavioural therapies and education of patients with special needs to remote and continuous patient physiological and psychological monitoring.
- Information and knowledge management in pervasive healthcare settings: from mobile and context aware communications, to scheduling, awareness and co-ordination systems and their impact on patient healthcare records.

### 3. Collaborative Healthcare and Organisational and Management Mechanisms

- Applications of social media in healthcare; Creating virtual spaces for collaborative exchange of experiences and information; Infrastructures and frameworks for implementing collaborative and virtual healthcare applications; Semantic collaborative models which understand relationships between patients and healthcare professionals; The role of social networking in disseminating healthcare related data; Privacy policies across social networking in healthcare domains.
- Accessing and sharing heterogeneous healthcare repositories or databases for performance management and clinical governance; simulation modelling, data mining, performance analysis and decision-making in healthcare.
- Consumer centred care: empowering patients; delivery of personalised health services; moving health information with consumers/patients; personalising management of illnesses, treatments, rehabilitation regimes; patient's access to clinical information.

#### **Minitrack Co-chairs**

##### **Radmila Juric (primary contact)**

Dpt. of IS and Computing  
 School of Electronics and Computer Science  
 University of Westminster  
 115 New Cavendish Street  
 London W1W 6UW, UK  
 Tel: +44-20-7911-5000 Ext: 3591  
 Fax: +44-20-7911-5089  
 Email: juricr@wmin.ac.uk

##### **Jasna Kuljis**

School of IS and Computing,  
 Brunel University  
 Uxbridge, Middlesex  
 UB8 3PH, UK  
 Tel: +44-1895-266-015  
 Fax: +44-1895-251-686  
 Email: Jasna.Kuljis@brunel.ac.uk

##### **Patricia Oberndorf**

Dynamic Systems  
 Software Engineering Institute,  
 Carnegie Mellon University  
 4500 Fifth Avenue  
 Pittsburgh, PA 15213-2612

Tel.: 412-268-6138  
Fax: 412-268-5758  
Email: [po@sei.cmu.edu](mailto:po@sei.cmu.edu)

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