

Preface

The main part of the publications in the present issue are extended versions of selected papers from two scientific events, organized by FP7 project “Advanced Computing for Innovation” (ACOMIN), Grant Agreement 316087 of Call FP7 REGPOT-2012-2013-1.

Six selected papers were approved after a selection process among the papers accepted for the workshop “Autonomic Computing and Automatic Control in Computer Systems”. The workshop has been organized as a co-event of the International Conference “Automatics and Informatics”, October 3-4, 2013 in Sofia, Bulgaria, which is the annual scientific event of the professionals in the domain of automatics and informatics in Bulgaria. The workshop “Autonomic Computing and Automatic Control in Computer Systems” was devoted to presentations of the research results achieved by the scientific works connected with the project “Advanced Computing for Innovation”. The Workshop has united scientists from Bulgarian Academy of Sciences; Technical University, Sofia; University of Artois, France; Scientific Institute of Transport Technologies, Paris, France; University of Technologies, Belfort, France, who participate actively in the research and development of modern transportation systems. Most of the particular topics considered in the workshop, concern modeling, control and optimization of the transportation systems. The selected papers give idea about the application of new formal models in transportation systems; application of new control strategies in transport flows; optimization of the transport behavior taking into account the subjective drivers’ specifics and predicting the situations with high probability of accidents.

Two papers were selected from the submissions to the Workshop “Information and Communication Technologies for Human Health and Quality of Life” (ICT-HuHeQuL), held in Stara Zagora, Mineral Baths, May 15-17, 2013. They give impression about the diversity of ICT applications for human health and quality of life, addressing two different RTD directions: mechatronic approaches to passive control of the manipulation systems associated with specialized robotics and modeling of protein folding changes when some amino acids are mutated.

The workshops “Autonomic Computing and Automatic Control in Computer Systems” and “Information and Communication Technologies for Human Health and Quality of Life” were planned as dissemination events of ACOMIN project. They proved to be successful events both for the development of new research achievements and for assessment of the potential of researches related to the necessities of practice.

We will be happy to meet in the near future additional evidences of the importance and usability of the results, presented here.

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