CSIT'2012

Proceedings of the 14th International Workshop on

Computer Science and Information Technologies

Ufa – Hamburg – Norwegian Fjords
September 20 - 26, 2012

Volume 2

The Workshop on Computer Science and Information Technologies (CSIT) is an annual international conference providing a forum for exchange of scientific achievements between research communities of Eastern Europe and the rest of the world in the area of computer science and information technologies. *The 14th* International *Workshop on Computer Science and Information Technologies (CSIT'2012)* was aimed at bringing together researchers, practitioners, developers, and users to explore new concepts, tools and techniques for advanced information technologies.

The papers are included as they are submitted by the authors, without editing

Foreword

These Proceedings contain the full texts of the papers, selected for presentation at the 14th International Workshop on Computer Science and Information Technologies (CSIT'2012). The previous thirteen Workshops on Computer Science and Information Technologies (CSIT) were organized in Moscow (1999), Ufa (2000, 2001, 2003, 2005, 2007), Patras, Greece (2002), Budapest, Hungary (2004), Karlsruhe, Germany (2006), Antalya, Turkey (2008), Crete, Greece (2009), Moscow-Saint-Petersburg, Russia (2010), Garmisch-Partenkirchen, Germany (2011). The Workshop's aim is bringing together researchers from different areas, including Distributed Information Systems, Data&Knowledge Management, Computer Control, IT Applications. These areas are heavily related nowadays.

The Workshop attracted more than two hundred submitted technical papers from different countries including both conceptual and experience papers. Both types of submissions were evaluated similarly, in accordance with standards of international forums. The careful reviewing procedure by the program committee resulted in 61 papers being chosen for the presentation in the international track (Volume 2). The next sections – Industrial Information Systems, Conceptual Modeling and Decision Support Systems, Text, Data Processing, Artificial Intelligence, Mathematical Models, Algorithms and Simulation, Information Security Systems and Networks, Intelligent Control and IT in Mobile Robotics, IT in Social and Economic Modeling, Mathematical Methods in Economics, IT in Educational Systems – appear to be gaining attention. Some of the experience papers, especially at the industrial sessions, reflect the results in development/application of real systems, and were considered by the program committee to be of interest to a wider community.

The Program Committee would like to extend appreciation to all those who submitted the preliminary versions of the papers or extended abstracts for international peer reviewing.

Finally, our thanks go to all the attendees of the Workshop here at the comfortable ship "MSC Lirica" that boosted the research activity in the Computer Science and Information Technologies areas.

Guzairov Murat

Heinz Woern   *Nafisa Yusupova*

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Symposium Organization

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