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Technology: Proceedings
of 36th International
Conference on Information
Systems Architecture and
Technology — ISAT 2015 —
Part IV



Advances in Intelligent Systems and Computing

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Preface

This four volume set of books includes the proceedings of the 2015 36th International Conference Information Systems Architecture and Technology (ISAT), or ISAT 2015 for short, held on September 20–22, 2015, in Karpacz, Poland. The conference was organized by the Department of Computer Science and Department of Management Systems, Faculty of Computer Science and Management, Wrocław University of Technology, Poland.

The International Conference Information Systems Architecture is organized by the Wrocław University of Technology from the seventies of the last century. The purpose of the ISAT is to discuss a state of the art of information systems concepts and applications as well as architectures and technologies supporting contemporary information systems. The aim is also to consider an impact of knowledge, information, computing, and communication technologies on managing the organization scope of functionality as well as on enterprise information systems design, implementation, and maintenance processes taking into account various methodological, technological, and technical aspects. It is also devoted to information systems concepts and applications supporting exchange of goods and services by using different business models and exploiting opportunities offered by Internet-based electronic business and commerce solutions.

ISAT is a forum for specific disciplinary research, as well as on multi-disciplinary studies to present original contributions and to discuss different subjects of today's information systems planning, designing, development, and implementation. The event is addressed to the scientific community, people involved in variety of topics related to information, management, computer, and communication systems, and people involved in the development of business information systems and business computer applications.

This year, we received 130 papers from 17 countries. The papers included in the four proceeding volumes published by Springer have been subject to a thoroughgoing review process by highly qualified peer reviewers. Each paper was reviewed by at least two members of Program Committee or Board of Reviewers. Only 74 best papers were selected for oral presentation and publication in the

vi Preface

36th International Conference Information Systems Architecture and Technology 2015 proceedings. The final acceptance rate was 57 %.

Professor Peter Nelsen (Denmark) presented his keynote speech on Some Insights from Big Data Research Projects. He also organized the special session on the advances in methods for managing complex planning environments.

The conference proceedings are divided into four volumes and present papers in the areas of managing complex planning environments, systems analysis and modeling, finance, logistics and market, artificial intelligence, knowledge-based management, Web systems, computer networks and distributed computing, high performance computing, cloud computing, multi-agent systems, Internet of Things, mobile systems, service-oriented architecture systems, knowledge discovery, and data mining.

We would like to thank the Program Committee and external reviewers, essential for reviewing the papers to ensure a high standard of the ISAT 2015 conference and the proceedings. We thank the authors, presenters, and participants of ISAT 2015; without them, the conference could not have taken place. Finally, we thank the organizing team for the efforts this and previous years in bringing the conference to a successful conclusion.

September 2015

Zofia Wilimowska Leszek Borzemski Adam Grzech Jerzy Świątek

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ISAT 2015 Keynote Speaker

Professor Peter Nielsen, Aalborg University, Aalborg, Denmark Topic: Some Insights from Big Data Research Projects

ISAT 2015 Invited Session

Advances in Methods for Managing Complex Planning Environments Chair: Peter Nielsen, Denmark

Contents

Part I Finance, Logistics and Market	
Data Mining Methods for Long-Term Forecasting of Market Demand for Industrial Goods	3
The Analyses of Factors Which Influence the Discount Rate—with an Example of IT Sector	15
Risk Management on Different Types of Stock Exchange Markets Anna Maria Kiłyk	29
The Selection of Variables in the Models for Financial Condition Evaluation	39
Global Financial Crisis and the Decoupling Hypothesis	51
Project Appraisal in the Transport Sector	63
Testing the Probability Distribution of Financial Ratios Sebastian Klaudiusz Tomczak and Zofia Wilimowska	75
The Methodology of Modeling the Decision-Making Process for Planning the Logistics Supply Chain	85
Part II Artificial Intelligence Methods	
Goal-Driven Inference for Web Knowledge Based System	99

xiv Contents

A Simple Knowledge Base Software Architecture for Industrial Electrical Machine Design: Application to Electric Vehicle's	
In-Wheel Motor	111
Genetic Diversity in the Multiobjective Optimization of Paths in Graphs	123
New Algorithm for On-line Signature Verification Using Characteristic Global Features	137
New Algorithm for On-line Signature Verification Using Characteristic Hybrid Partitions	147
Nonlinear Pattern Classification Using Fuzzy System and Hybrid Genetic-Imperialist Algorithm	159
A Novel Approach to Fuzzy Rough Set-Based Analysis of Information Systems	173
Using Genetic Algorithm for Optimal Dispatching of Reactive Power in Power Systems	185
Computer-Aided Diagnosis System with Backpropagation Artificial Neural Network—Improving Human Readers Performance	197
Hybrid Recognition Technology for Isolated Voice Commands Gintarė Bartišiūtė, Kastytis Ratkevičius and Gintarė Paškauskaitė	207
A New Knowledge Measure of Information Carried by Intuitionistic Fuzzy Sets and Application in Data Classification Problem	217
Author Index	227

Part I Finance, Logistics and Market