Preface

The International conference on Business Informatics Research (BIR) focusses on fields of business informatics. In particular, it targets the research that bridges management and engineering aspects and facilitates communication between scientific and practical applications. This volume contains publications presented at workshops and doctoral consortium of the BIR 2016 conference, organised in Prague, Czech Republic, 14-16 September, 2016.

This volume includes publications presented at the 4th International Workshop on Intelligent Educational Systems, Technology-enhanced Learning and Technology Transfer Models (INTEL-EDU 2016), the 1st Workshop on Managed Complexity (ManComp 2016), the 9th Workshop on Information Logistics and Applications of Semantic Technologies (ILOG 2016), and the doctoral consortium of the 15th International Conference on Business Informatics Research (BIR 2016).

The 4th International Workshop on Intelligent Educational Systems, Technology-enhanced Learning and Technology Transfer Models (INTEL-EDU 2016) was organised by Janis Grundspenkis, Leonids Novickis and Egils Ginters. INTEL-EDU 2016 continues the series of workshops held in 2009, 2011 and 2012. The main aim of the INTEL-EDU is to provide an international platform for presentation of research on intelligent educational systems theory, development of advanced software tools and technologies, their innovative applications, and dissemination and technologies transfer. Eleven papers were presented this year, devoted to the representation of knowledge structures in educational collaborative systems, mobile-assisted education, adaptive intelligent tutoring systems based on learner models and emotion recognition, geospatial data based environment, simulation training, learning process assessment, and development and implementation of innovation strategies.

The 1st Workshop on Managed Complexity (ManComp 2016) was organised by Marite Kirikova and Peter Forbrig. The workshop had its focus on managing complexity. Managing complexity has a long tradition for algorithms and general problems. One well known strategy used is “divide and conquer”. Managing complexity is important even for algorithms of problems with small size. However nowadays informatics require managing complexity at different levels and configurations of social, physical, enterprise, software and hardware systems. The workshop focused on approaches and methods for managing complexity in the domain of applied informatics that may concern an interplay of systems and ecosystems of various sizes and substance. Its purpose was to share and transfer knowledge on complexity identification, representation, controlling and reduction as well as to exploit possible synergies in development of innovative complexity handling strategies, approaches, and methods. The goal of the workshop in which seven papers were presented was to bring together researchers and practitioners to discuss theoretical approaches or real-life case studies featuring success and/or failure stories in managing complexity.

The 9th Workshop on Information Logistics and Applications of Semantic Technologies (ILOG 2016) was organised by Kurt Sandkuhl and Ulf Seigerroth. The workshop focuses on approaches, methods, technologies and solution for reducing information overflow and for improving information flow in organizations. Knowledge-intensive industry and service sectors, public organizations and governmental bodies are dependent on accurate and timely information supply for efficient and high quality processes and services. Intelligent information supply has become an important issue that is characterized by just-in-time, demand-oriented and context-sensitive information. The digitization of businesses including Internet-of-Things applications (IoT), Cyber-Physical Systems (CPS) and big data (BD) challenges pose new requirements to optimized information supply and emphasize the importance of information logistics solutions.

A specific focus of this year’s ILOG edition in which 6 papers were presented is on semantic technologies, like ontologies, semantic nets, semantic web standards and other knowledge technologies.

This year’s BIR Doctoral Consortium was organized by Tomáš Pitner. The BIR 2016 DC provided doctoral students with a good place for receiving an early feedback on their progress from the field experts and experienced researchers. This year four doctoral papers were presented. The discussed topics included Enterprise Architecture (EA), Business Process Management (BPM), object modeling, advanced metering management and smart grid related legislation.

We would like to thank all Workshop Chairs and their Program Committee members for their diligence in selecting the papers and ensuring their high scientific quality.

Björn Johansson
Filip Vencovský
September 2016
Organisation

BIR 2016 Workshop Chair
Björn Johansson Department of Informatics, School of Economics and Management, Lund University, Sweden

BIR 2016 Doctoral Consortium Chair
Tomáš Pitner Masaryk University, Czech Republic

9th Workshop on Information Logistics and Applications of Semantic Technologies (ILOG 2016)

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Ulf Seigerroth Jönköping University, Sweden

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1st Workshop on Managed Complexity (ManComp 2016)

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Marco Winckler Paul Sabatier University Toulouse, France
4th International Workshop on Intelligent Educational Systems, Technology-enhanced Learning and Technology Transfer Models (INTEL-EDU 2016)

INTEL-EDU 2016 Workshop co-chairs
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Leonids Novickis  Riga Technical University, Latvia
Egils Ginters  Riga Technical University, Latvia

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