

Business Information Systems Workshops Bis 2015 International Workshops Poznan Poland June 24 26 2015 Revised Papers Lecture Notes In Business Information Processing

The volume presents a collection of peer-reviewed articles from the 9th KES International Conference on Intelligent Decision Technologies (KES-IDT-17), held in Vilamoura, Algarve, Portugal on 21–23 June 2017. The conference addressed critical areas of computer science, as well as promoting knowledge transfer and the generation of new ideas in the field of intelligent decision making, project management and data analysis. The range of topics addressed includes methods of classification, prediction, data analysis, decision support, modeling, social media and many more in such diverse areas as finance, linguistics, management and transportation.

The volume presents a collection of 44 peer-reviewed articles from the First International Conference on Intelligent Systems in Production Engineering and Maintenance (ISPEM 2017). ISPEM 2017 was organized by the Faculty of Mechanical Engineering, Wroc?aw University of Science and Technology and was held in Wroc?aw (Poland) on 28–29 September 2017. The main topics of the conference included the possibility of using widely understood intelligent methods in production engineering. New solutions for innovative plants, research results and case studies taking into account advances in production and maintenance from the point of view of Industry 4.0 were presented and discussed—with special attention paid to applications of intelligent systems, methods and tools in production engineering, maintenance, logistics, quality management, information systems, and product development. The volume is divided into two parts: 1. Intelligent Systems in Production Engineering 2. Intelligent Systems in Maintenance This book is an excellent reference resource for scientists in the field of manufacturing engineering and for top managers in production enterprises.

This book constitutes revised papers from the five workshops which were held during June 2020 at the 23rd International Conference on Business Information Systems, BIS 2020. The conference was planned to take place in Colorado Springs, CO, USA. Due to the COVID-19 pandemic it changed to a virtual format. There was a total of 54 submissions to all workshops of which 26 papers were accepted for publication. The workshops included in this volume are: BITA 2020: 11th Workshop on Business and IT Alignment BSCT 2020: 3rd Workshop on Blockchain and Smart Contract Technologies DigEX 2020: 2nd International Workshop on transforming the Digital Customer Experience iCRM 2020: 5th International Workshop on Intelligent Data Analysis in Integrated Social CRM QOD 2020: 3rd Workshop on Quality of Open Data

Process mining techniques can be used to discover, analyze and improve real processes, by extracting models from observed behavior. The aim of this book is conformance checking, one of the main areas of process mining. In conformance checking, existing process models are compared with actual observations of the process in order to assess their quality. Conformance checking techniques are a way to visualize the differences between assumed process represented in the model and the real process in the event log, pinpointing possible problems to address, and the business process management results that rely on these models. This book combines both application and research perspectives. It provides concrete use cases that illustrate the problems addressed by the techniques in the book, but at the same time, it contains complete conceptualization and formalization

of the problem and the techniques, and through evaluations on the quality and the performance of the proposed techniques. Hence, this book brings the opportunity for business analysts willing to improve their organization processes, and also data scientists interested on the topic of process-oriented data science.

Re-conceptualizing Enterprise Information Systems

BIS 2010 International Workshop, Berlin, Germany, May 3-5, 2010, Revised Papers

The Complete Business Process Handbook

New Trends in Business Information Systems and Technology

Electronic Government and the Information Systems Perspective

This book constitutes the refereed proceedings of the four workshops that were organized in conjunction with the International Conference on Business Information Systems, BIS 2012, which took place in Vilnius, Lithuania, May 21-23, 2012. In addition, the papers from the Future Internet Symposium, which was organized in conjunction with BIS 2012, are also included. BIS workshops give researchers the opportunity to share their preliminary ideas and first experimental results, and discuss research hypotheses with a highly focused audience. The 24 papers were carefully reviewed and selected from 63 submissions and were revised and extended after the event. The workshop topics covered applications and economics of knowledge-based technologies (AKTB), business and IT alignment (BITA), enterprise systems for higher education (ESHE), and formal semantics for future enterprises (FSFE). In addition, one invited paper from BITA is also included in this volume.

*This book contains revised papers from the three workshops and two accompanying events that took place at the 20th International Conference on Business Information Systems, BIS 2017, held in Poznan, Poland, in June 2017. The workshops included in this volume are: * The 9th Workshop on Applications of Knowledge-Based Technologies in Business – AKTB 2017 accepted 9 papers from 16 submissions and featured 1 invited paper. * The 8th Workshop on Business and IT Alignment - BITA 2017 selected 5 papers from 10 submissions. * The 1st Workshop on Sustainable Energy Systems, Smart Infrastructures, and Smart Environments – SESSISE 2017 selected 2 papers for inclusion in this book. In addition, BIS hosted a Doctoral Consortium from which 5 papers are included. Furthermore, two contributions from the Second National Congress on Information Systems, which took place during BIS, are included. The volume ends with an invited paper presented during a special session of the main BIS conference.*

This open access book explores the global challenges and experiences related to digital

entrepreneurial activities, using carefully selected examples from leading companies and economies that shape world business today and tomorrow. Digital entrepreneurship and the companies steering it have an enormous global impact; they promise to transform the business world and change the way we communicate with each other. These companies use digitalization and artificial intelligence to enhance the quality of decisions and augment their business and customer operations. This book demonstrates how cloud services are continuing to evolve; how cryptocurrencies are traded in the banking industry; how platforms are created to commercialize business, and how, taken together, these developments provide new opportunities in the digitalized era. Further, it discusses a wide range of digital factors changing the way businesses operate, including artificial intelligence, chatbots, voice search, augmented and virtual reality, as well as cyber threats and data privacy management. "Digitalization mirrors the Industrial Revolution's impact. This book provides a complement of perspectives on the opportunities emanating from such a deep seated change in our economy. It is a comprehensive collection of thought leadership mapped into a very useful framework. Scholars, digital entrepreneurs and practitioners will benefit from this timely work." Gina O'Connor, Professor of Innovation Management at Babson College, USA "This book defines and delineates the requirements for companies to enable their businesses to succeed in a post-COVID19 world. This book deftly examines how to accomplish and achieve digital entrepreneurship by leveraging cloud computing, AI, IoT and other critical technologies. This is truly a unique "must-read" book because it goes beyond theory and provides practical examples." Charlie Isaacs, CTO of Customer Connection at Salesforce.com, USA "This book provides digital entrepreneurs useful guidance identifying, validating and building their venture. The international authors developed new perspectives on digital entrepreneurship that can support to create impact ventures." Felix Staeritz, CEO FoundersLane, Member of the World Economic Forum Digital Leaders Board and bestselling author of FightBack, Germany

This book is the result of the first International Conference ICT Innovations 2009. The ICT Innovations conference is the primary scientific action of the Macedonian Society on Information and Communication Technologies (ICT-ACT). It promotes the publication of scientific results of the international community related to innovative fundamental and applied research in ICT. Today, ICT has enlarged its horizons and it is practiced under multidisciplinary contexts that introduce new challenges to theoretical and technical approaches. The ICT

Innovations 2009 conference gathered academics, professionals and practitioners reporting their valuable experiences in developing solutions and systems in the industrial and business arena especially innovative commercial implementations, novel applications of technology, and experience in applying recent research advances to practical situations, in any ICT areas. The conference focuses on issues concerning a variety of ICT fields like: • Multimedia Information Systems • Artificial Intelligence • Pervasive and Ubiquitous Computing • Eco and Bio Informatics • Internet and Web Applications and Services • Wireless and Mobile Communications and Services • Computer Networks, Security and Cryptography • Distributed Systems, GRID and Cloud Computing ICT Innovations 2009 Conference was held in Ohrid, Macedonia, in September 28-30, 2009. Local arrangements provided by the members of the Macedonian Society on Information and Communication Technologies – ICT-ACT, mainly consisting of teaching and research staff of Computer Science Department at Faculty of Electrical Engineering and Information Technologies and Institute of Informatics at Faculty of Natural Sciences, both at Ss. Cyril and Methodius University in Skopje, Macedonia.

Information Systems Architecture and Technology: Proceedings of 39th International Conference on Information Systems Architecture and Technology – ISAT 2018

Proceedings of the INFUS 2021 Conference, held August 24-26, 2021. Volume 1

Intelligent and Fuzzy Techniques for Emerging Conditions and Digital Transformation

BIS 2012 International Workshops and Future Internet Symposium, Vilnius, Lithuania, May 21-23, 2012 Revised Papers

11th IFIP WG 8.9 Working Conference, CONFENIS 2017, Shanghai, China, October 18-20, 2017, Revised Selected Papers

Trust, Digital Business and Technology

This book constitutes the refereed proceedings of the five workshops that were organized in conjunction with the International Conference on Business Information Systems, BIS 2015, which took place in Poznan, Poland, in June 2015. The 26 papers in this volume were carefully reviewed and selected from 56 submissions and were revised and extended after the event. The workshop topics covered knowledge-based business information systems (AKTB), business and IT alignment (BITA), transparency-enhancing technologies and privacy dashboards (PTDCS), semantics usage in enterprises (FSFE), and issues related to DBpedia. In addition two keynote papers are included in this book.

A hands-on, entry-level guide to algorithms for extracting information about social and economic behavior from network data.

This book presents selected examples of digitalization in the age of digital change. It is divided into two sections: “Digital Innovation,”

which features new technologies that stimulate and enable new business opportunities; and “Digital Business Transformation,” comprising business and management concepts that employ specific technological solutions for their practical implementation. Combining new insights from research, teaching and management, including digital transformation, e-business, knowledge representation, human-computer interaction, and business optimization, the book highlights the breadth of research as well as its meaningful and relevant transfer into practice. It is intended for academics seeking inspiration, as well as for leaders wanting to tap the potential of the latest trends to take society and their business to the next level.

This book constitutes revised papers from the six workshops held at the 19th International Conference on Business Information Systems, BIS 2016, held in Leipzig, Germany, in July 2016. The workshops included in this volume are: * The 8th Workshop on Applications of Knowledge-Based Technologies in Business - AKTB2016 accepted 7 papers from 14 submissions and features 1 invited talk. * The 7th Workshop on Business and IT Alignment - BITA 2016 selected 6 papers from 12 submissions. * The Workshop on Big Data and Business Analytics Ecosystems - DeBASE 2016 has 4 papers in this volume. * The First International Workshop on Intelligent Data Analysis in Integrated Social CRM - iCRM 2016 features 5 contributions. * The Second International Workshop on Digital Enterprise Engineering and Architecture - IDEA 2016 contributes 4 papers to this volume. * The First International Workshop on Integrative Analysis and Computation of Life Data for Smart Ecosystems - INCLuDE 2016 publishes 4 research papers. In addition, BIS hosted a Doctoral Consortium which was organized in a workshop formula. The best papers from this event are included in the book. In total, the workshops had 84 submissions of which 38 were accepted for publication.

Business Information Systems Workshops

BIS 2018 International Workshops, Berlin, Germany, July 18–20, 2018, Revised Papers

BIS 2014 International Workshops, Larnaca, Cyprus, May 22-23, 2014, Revised Papers

Digital Entrepreneurship

Research and Practical Issues of Enterprise Information Systems

Method Support for Enterprise Architectures Management

This book constitutes the refereed proceedings of the four workshops that were organized in conjunction with the International Conference on Business Information Systems, BIS 2013, which took place in Poznań, Poland, in June 2013. BIS workshops give researchers the opportunity to share their preliminary ideas and first experimental results and to discuss research hypotheses with a highly focused audience. The 25 papers in this volume were carefully reviewed and selected from 47 submissions and were re-examined after the event. The workshop topics covered applications and economics of knowledge-based technologies (AKTB), and IT alignment (BITA), enterprise systems for higher education (ESHE) and formal semantics for future enterprises (FSFE). In addition, two keynotes as well as ten papers presented at the PhD Symposium are also included in this volume.

This book contains 16 chapters by researchers working in various fields of data science. They focus on theory and application of language technologies, optimization, computational thinking, intelligent decision support systems, decomposition of signals, mo-

driven development methodologies, interoperability of enterprise applications, anomaly detection in financial markets, 3D virtual reality, monitoring of environmental data, convolutional neural networks, knowledge storage, data stream classification, and social networking. The respective papers highlight a wealth of issues in, and applications of, data science. Modern technologies allow us to store and transfer large amounts of data quickly. They can be very diverse - images, numbers, streaming, related to human behavior and physiological parameters, etc. Whether the data is just raw numbers, crude images, or will help solve current problems and predict future developments, depends on whether we can effectively process and analyze it. Data science is evolving rapidly. However, it is still a very young field. In particular, data science is concerned with visualizations, statistics, pattern recognition, neurocomputing, image analysis, machine learning, artificial intelligence, databases and data processing, data mining, big data analytics, and knowledge discovery in databases. It also has many interfaces with optimization, block chaining, cyber-social and physical systems, Internet of Things (IoT), social computing, high-performance computing, in-memory key-value stores, cloud computing, social computing, data feeds, overlay networks, cognitive computing, crowdsourcing analysis, log analysis, containerization, virtualization, and lifetime value modeling. Again, all of these areas are highly interrelated. In addition, data science is now expanding to new fields of application: chemical engineering, biotechnology, building energy management, materials microscopy, geographical research, learning analytics, radiology, metal design, ecosystem homeostasis investigation, and many others.

This book constitutes revised papers from the nine workshops and one accompanying event which took place at the 22nd International Conference on Business Information Systems, BIS 2019, held in Seville, Spain, in June 2019. There was a total of 139 submissions to the workshops of which 57 papers were accepted for publication. The workshops included in this volume are: AKTB 2019: 11th Workshop on Applications of Knowledge-Based Technologies in Business BITA 2019: 10th Workshop on Business and IT Alignment BSCT 2019: Second Workshop on Blockchain and Smart Contract Technologies DigEx 2019: First International Workshop on transforming the Digital Customer Experience iCRM 2019: 4th International Workshop on Intelligent Data Analysis in Integrated Social CRM IDEAS 2019: 4th Workshop on Big Data and Business Analytics Ecosystems ISMAD 2019: Workshop on Information Systems and Applications in Maritime Domain QOD 2019: Second Workshop on Quality of Open Data SciBOWater 2019: Second Workshop on Scientific Challenges and Business Opportunities in Water Management

This book constitutes revised papers from the eight workshops which were held during June 2021 at the 24th International Conference on Business Information Systems, BIS 2021. The conference was planned to take place in Hannover, Germany, and changed to an online event due to the COVID-19 pandemic. There was a total of 67 submissions to all workshops of which 31 papers were accepted for publication. The workshops included in this volume are: AKTB 2021: 12th Workshop on Applications of Knowledge-Based Technologies in Business BisEd 2021: BIS Education: Trends and Challenges DigBD 2021: 1st Workshop on Digitization in the Financial Big Data Scenarios DigEx 2021: 3rd International Workshop on transforming the Digital Customer Experience iCRM 2021: 6th International Workshop on Integrated Social CRM QOD 2021: 4th Workshop on Quality of Open Data BITA 2021: 12th Workshop on Business and IT Alignment BSCT 2021: 4th Workshop on Blockchain and Smart Contract Technologies

ICT Innovations 2009

Intelligent Systems in Production Engineering and Maintenance – ISPEM 2017

Capability Management Guide

Proceedings of International Conference on Network Security and Blockchain Technology

BIS 2009 International Workshops, Poznan, Poland, April 27-29, 2009, Revised Papers

Second International Conference, EGOVIS 2011, Toulouse, France, August 29 -- September 2, 2011, Proceedings

This book constitutes the refereed proceedings of the 1st International Congress on Blockchain and Applications 2021, BLOCKCHAIN'21, held in Salamanca, Spain, in October 2021. Among the scientific community, blockchain and artificial intelligence are a promising combination that will transform the production and manufacturing industry, media, finance, insurance, e-government, etc. Nevertheless, there is no consensus with schemes or best practices that would specify how blockchain and artificial intelligence should be used together. The 38 full papers presented were carefully reviewed and selected from over 44 submissions. They contain the latest advances on blockchain and artificial intelligence and on their application domains, exploring innovative ideas, guidelines, theories, models, technologies, and tools and identifying critical issues and challenges that researchers and practitioners must deal with in future research.

Advances in machine learning techniques and ever-increasing computing power has helped create a new generation of hardware and software technologies with practical applications for nearly every industry. As the progress has, in turn, excited the interest of venture investors, technology firms, and a growing number of clients, implementing intelligent automation in both physical and information systems has become a must in business. Handbook of Research on Smart Technology Models for Business and Industry is an essential reference source that discusses relevant abstract frameworks and the latest experimental research findings in theory, mathematical models, software applications, and prototypes in the area of smart technologies. Featuring research on topics such as digital security, renewable energy, and intelligence management, this book is ideally designed for machine learning specialists, industrial experts, data scientists, researchers, academicians, students, and business professionals seeking coverage on current smart technology models.

This book explores the impact of industry 4.0 on agricultural supply chains, exploring how changes such as increased digitisation, automation, and the digital value chain, will impact food production globally. At a time when increasing population and environmental degradation puts stress on food supply chains, traditional farming operation models struggle to maintain both sustainability and transparency. Industry 4.0 could lead to digitalised ways of farming and agricultural production processes that will transform the traditional operating and process models to digital, data-intensive methods focusing on analytics and decision-making practices. This

book aims to provide the reader with an understanding of the concept of Agriculture 4.0 in relation to supply chain management. Different applications of Agricultural 4.0 supply chains are discussed in relation to their respective advantages and disadvantages. Dr. Stella Despoudi is Lecturer in Operations and Supply Chain Management at Aston University and Adjunct Lecturer in Supply Chain Management at the University of Western Macedonia, Greece. Dr. Konstantina Spanaki is a Lecturer in Information Management at Loughborough University, UK. Dr. Oscar Rodríguez-Espíndola is a Senior lecturer in Operations and Supply Chain Management at Aston University and a member of the Aston CRISIS centre, UK. Dr. Efpraxia Zamani is a Senior Lecturer of Information Systems at the University of Sheffield, UK.

This three-volume set of books presents advances in the development of concepts and techniques in the area of new technologies and contemporary information system architectures. It guides readers through solving specific research and analytical problems to obtain useful knowledge and business value from the data. Each chapter provides an analysis of a specific technical problem, followed by the numerical analysis, simulation and implementation of the solution to the problem. The books constitute the refereed proceedings of the 2017 38th International Conference "Information Systems Architecture and Technology," or ISAT 2017, held on September 17-19, 2017 in Szklarska Poręba, Poland. The conference was organized by the Computer Science and Management Systems Departments, Faculty of Computer Science and Management, Wrocław University of Technology, Poland. The papers have been organized into topical parts: Part I— includes discourses on topics including, but not limited to, Artificial Intelligence Methods, Knowledge Discovery and Data Mining, Big Data, Knowledge Discovery and Data Mining, Knowledge Based Management, Internet of Things, Cloud Computing and High Performance Computing, Distributed Computer Systems, Content Delivery Networks, and Service Oriented Computing. Part II—addresses topics including, but not limited to, System Modelling for Control, Recognition and Decision Support, Mathematical Modelling in Computer System Design, Service Oriented Systems and Cloud Computing and Complex Process Modeling. Part III—deals with topics including, but not limited to, Modeling of Manufacturing Processes, Modeling an Investment Decision Process, Management of Innovation, Management of Organization.

BIS 2020 International Workshops, Colorado Springs, CO, USA, June 8-10, 2020, Revised Selected Papers Proceedings of the First International Conference on Intelligent Systems in Production Engineering and Maintenance ISPEM 2017

**Handbook of Research on Smart Technology Models for Business and Industry
Body of Knowledge from Process Modeling to BPM
Comparing Observed and Modeled Processes**

BIS 2013 International Workshops, Poznań, Poland, June 19-20, 2013, Revised Papers

This book constitutes revised papers from the seven workshops and one accompanying event which took place at the 21st International Conference on Business Information Systems, BIS 2018, held in Berlin, Germany, in July 2018. Overall across all workshops, 58 out of 122 papers were accepted. The workshops included in this volume are: AKTB 2018 - 10th Workshop on Applications of Knowledge-Based Technologies in Business BITA 2018 - 9th Workshop on Business and IT Alignment BSCT 2018 - 1st Workshop on Blockchain and Smart Contract Technologies IDEA 2018 - 4th International Workshop on Digital Enterprise Engineering and Architecture IDEATE 2018 - 3rd Workshop on Big Data and Business Analytics Ecosystems SciBOWater 2018 - Scientific Challenges & Business Opportunities in Water Management QOD 2018 - 1st Workshop on Quality of Open Data In addition, one keynote speech in full-paper length and contributions from the Doctoral Consortium are included

This book constitutes the proceedings of the nine workshops that were organized in conjunction with the Business Information Systems Conference, BIS 2009, taking place in Poznan, Poland, on April 27-29, 2009. The 34 papers presented were carefully reviewed and selected from 72 submissions. In addition, the volume contains the BIS 2009 keynote speech and two invited speeches presented at the workshops LIT and ECONOM/Enterprise X.O. The topics covered are DeepWeb (ADW), applications and economics of knowledge-based technologies (AKTB, ECONOM), service-oriented architectures (SDS-SOA), legal IT (LIT), social Web and Web 2.0 (SAW, Enterprise X.O), e-learning (EeLT), and enterprise systems in higher education (ESHE). This book constitutes the refereed proceedings of the three workshops that were organized in conjunction with the International Conference on Business Information Systems, BIS 2011, which took place in Poznań, Poland, June 15-17, 2011. The 18 workshop papers presented were carefully reviewed and selected from 38 submissions. The topics covered are applications and economics of knowledge-based technologies (AKTB), business and IT alignment (BITA), and legal information systems (LIT). In addition, eight papers from the co-located Business Process and Services Computing Conference (BPSC) are also included in this volume.

Business Information Systems Workshops BIS 2019 International Workshops, Seville, Spain, June 26-28, 2019, Revised Papers Springer Nature

3rd International Congress

Proceedings of the 9th KES International Conference on Intelligent Decision Technologies (KES-IDT 2017)

- Part II

Digital Innovation and Digital Business Transformation

Technological Advance for Sustainability

Blockchain and Applications

Frameworks of IT Prosumption for Business Development

This book investigates what enterprises can do and/or what should it be capable of in order to accelerate organizational changes. Therefore, a capability-based method is developed, which assists in the identification, structuring and management of capabilities. The approach is embedded in a process comprising four building blocks that provide appropriate procedures, concepts and supporting tools evolved from theory and practical use cases. The guide represents a flexible method for capability newcomers and experienced audiences to optimize enterprises' economic impacts of EAM supporting the alignment of business and IT.

This three-volume set of books highlights major advances in the development of concepts and techniques in the area of new technologies and architectures of contemporary information systems. Further, it helps readers solve specific research and analytical problems and glean useful knowledge and business value from the data. Each chapter provides an analysis of a specific technical problem, followed by a numerical analysis, simulation and implementation of the solution to the real-life problem. Managing an organisation, especially in today's rapidly changing circumstances, is a very complex process. Increased competition in the marketplace, especially as a result of the massive and successful entry of foreign businesses into domestic markets, changes in consumer behaviour, and broader access to new technologies and information, calls for organisational restructuring and the introduction and modification of management methods using the latest advances in science. This situation has prompted many decision-making bodies to introduce computer modelling of organisation management systems. The three books present the peer-reviewed proceedings of the 39th International Conference "Information Systems Architecture and Technology" (ISAT), held on September 16–18, 2018 in Nysa, Poland. The conference was organised by the Computer Science and Management Systems Departments, Faculty of Computer Science and Management, Wroclaw University of Technology and Sciences and University of Applied Sciences in Nysa, Poland. The papers have been grouped into three major parts: Part I—discusses topics including but not limited to Artificial Intelligence Methods, Knowledge Discovery and Data Mining, Big Data, Knowledge Based Management, Internet of Things, Cloud Computing and High Performance Computing, Distributed Computer Systems, Content Delivery Networks, and Service Oriented Computing. Part II—addresses topics including but not limited to System Modelling for Control, Recognition and Decision Support, Mathematical Modelling in Computer System Design, Service Oriented Systems and Cloud Computing, and Complex Process Modelling. Part III—focuses on topics including but not limited to Knowledge Based Management, Modelling of Financial and Investment Decisions, Modelling of Managerial Decisions, Production Systems Management and Maintenance, Risk Management, Small Business Management, and Theories and Models of Innovation.

This Online Course Pack consists of Business Information Systems, 5/e by Graham Curtis and David Cobham (ISBN: 0273687921), plus access to a Pearson Education Online Course (ISBN: 0273700103). This text helps students to gain a comprehensive understanding of how information systems can aid the realisation of business objectives. The book covers BIS from a business, a technical and a systems development perspective. With balanced and clear coverage of the technical systems aspects of BIS and the more managerial topics, this well-established text provides a solid coverage of the topic from systems analysis design and planning to data mining, business intelligence and knowledge management. Companion website includes multiple choice questions, hints to the questions in the book, weblinks, online glossary and additional case studies Suitable to students taking a BIS degree or a BIS module on a business or computing degree.

Business information systems is a rapidly developing domain. There are many topics that deserve attention but have not yet found a place in canonical research. Workshops give researchers the possibility to share preliminary ideas, first - perimental results, or to discuss research hypotheses. Discussions held during presentations strengthen the paper and prepare it for publication. From our - perience, workshops are a perfect instrument with which to create a community around very speci?c research topics, thus o?ering the opportunity to promote it. Topics that do not ?nd critical feedback at the main International Conference on Business Information Systems (BIS) may experience fruitful discussion when confronted with a well-focused audience. Over the last few decades, business informationsystems have been one of the most important factors of the transition toward a knowledge-based economy. At the same time they have been subject to continuous rapid development and innovation driven both by industry and by academia. For the last 12 years these innovations were carefully observed but also shaped by researchers attending BIS yearly.

Part III

Issues and Challenges

ICNSBT 2021

OOPSLA ' 99 Workshop Proceedings 2 November 1999, Denver, Colorado, USA

BIS 2017 International Workshops, Pozna , Poland, June 28-30, 2017, Revised Papers

BIS 2016 International Workshops, Leipzig, Germany, July 6-8, 2016, Revised Papers

This book constitutes the refereed proceedings of the five workshops that were organized in conjunction with the International Conference on Business Information Systems, BIS 2014, which took place in Larnaca, Cyprus, in May 2014. The 27 papers in this volume were carefully reviewed and selected from 53 submissions and were

revised and extended after the event. The workshop topics covered applications and economics of knowledge-based technologies (AKTB), business and IT alignment (BITA), digital currencies (DC), modern applications of business information systems (MODAPP), and tools for setting up and running a business in cloud computing (TSRB). In addition a keynote paper is included in this book.

This book presents recent research in intelligent and fuzzy techniques. Emerging conditions such as pandemic, wars, natural disasters and various high technologies force people for significant changes in business and social life. The adoption of digital technologies to transform services or businesses, through replacing non-digital or manual processes with digital processes or replacing older digital technology with newer digital technologies through intelligent systems is the main scope of this book. It focuses on revealing the reflection of digital transformation in our business and social life under emerging conditions through intelligent and fuzzy systems. The latest intelligent and fuzzy methods and techniques on digital transformation are introduced by theory and applications. The intended readers are intelligent and fuzzy systems researchers, lecturers, M.Sc. and Ph.D. students studying digital transformation. Usage of ordinary fuzzy sets and their extensions, heuristics and metaheuristics from optimization to machine learning, from quality management to risk management makes the book an excellent source for researchers.

The Complete Business Process Handbook is the most comprehensive body of knowledge on business processes with revealing new research. Written as a practical guide for Executives, Practitioners, Managers and Students by the authorities that have shaped the way we think and work with process today. It stands out as a masterpiece, being part of the BPM bachelor and master degree curriculum at universities around the world, with revealing academic research and insight from the leaders in the market. This book provides everything you need to know about the processes and frameworks, methods, and approaches to implement BPM. Through real-world examples, best practices, LEADing practices and advice from experts, readers will understand how BPM works and how to best use it to their advantage. Cases from industry leaders and innovators show how early adopters of LEADing Practices improved their businesses by using BPM technology and methodology. As the first of three volumes, this book represents the most comprehensive body of knowledge published on business process. Following closely behind, the second volume uniquely bridges theory with how BPM is applied today with the most extensive information on extended BPM. The third volume will explore award winning real-life examples of leading business process practices and how it can be replaced to your advantage. Learn what Business Process is and how to get started Comprehensive historical process evolution In-depth look at the Process Anatomy, Semantics and Ontology Find out how to link Strategy to Operation with value driven BPM Uncover how to establish a way of Thinking, Working, Modelling and Implementation Explore comprehensive Frameworks, Methods and

Approaches How to build BPM competencies and establish a Center of Excellence Discover how to apply Social BPM, Sustainable and Evidence based BPM Learn how Value & Performance Measurement and Management Learn how to roll-out and deploy process Explore how to enable Process Owners, Roles and Knowledge Workers Discover how to Process and Application Modelling Uncover Process Lifecycle, Maturity, Alignment and Continuous Improvement Practical continuous improvement with the way of Governance Future BPM trends that will affect business Explore the BPM Body of Knowledge

Trust, Digital Business and Technology: Issues and Challenges presents and discusses the main issues and challenges related to digital trust and information technologies. The subject of trust is relevant to both practitioners and researchers. It is widely recognized and confirmed that trust, especially mutual trust, when it is built at the right level, reduces the risk of interaction and increases the collaboration between partners. Readers will gain from this book theoretical and practical knowledge on digital trust; theoretically, well-grounded knowledge on digital trust and related concepts, empirically validated by practice. Most authors have taken innovative approaches to consider issues highlighting a selected aspect of the core theme of this book. The intended audiences of this book are professionals, scholars, and students.

BIS 2011 International Workshops and BPSC International Conference, Poznań, Poland, June 15-17, 2011, Revised Papers

Information Systems Architecture and Technology: Proceedings of 38th International Conference on Information Systems Architecture and Technology - ISAT 2017

Conformance Checking and Diagnosis in Process Mining

BIS 2019 International Workshops, Seville, Spain, June 26-28, 2019, Revised Papers

5th IFIP WG 8.9 Working Conference, CONFENIS 2011, Aalborg, Denmark, October 16-18, 2011, Revised Selected Papers

BIS 2015 International Workshops, Poznań, Poland, June 24-26, 2015, Revised Papers

The NCITS Accredited Standards Committee H7 Object Information Management, now part of NCITS T3 Open Distributed Processing, and the Object Management Group Business Object Domain Task Force (BODTF) jointly sponsored the Fifth Annual OOPSLA Workshop on Business Object Component Design and Implementation. The focus of the workshop was on design and implementation of business object component frameworks and architectures. Key aspects discussed included:

- What is a comprehensive definition of a business object component'?
- Are the four layers (user, workspace, enterprise, resource) presented at the OOPSLA'98 workshop the right way to layer a..bysiness object component. system?
- How is a business object component implemented across these layers? What are the associated artefacts? Are there different object models representing the same business object component in different layers?
- What are the

dependencies between business object components? How can they be plug and play given these dependencies? How can they be flexible and adaptive? How do they participate in workflow systems? • How will the emergence of a web-based distributed object-computing infrastructure based on XML, influence business object component architectures? In particular, is the W3C WebBroker proposal appropriate for distributed business object component computing? The aim of the workshop was to: • Enhance the pattern literature on the specification, design, and implementation of interoperable, plug and play, distributed business object components.

The book is a collection of best selected research papers presented at International Conference on Network Security and Blockchain Technology (ICNSBT 2021), organized by Computer Society of India—Kolkata Chapter, India, during December 2–4, 2021. The book discusses recent developments and contemporary research in cryptography, network security, cyber security, and blockchain technology. Authors are eminent academicians, scientists, researchers, and scholars in their respective fields from across the world.

Separation distinction between the roles of the producer and consumer has become blurred with the development of new science and technologies enabling the emergence of the prosumer, or the active consumer. In the IT sector, the role of the end-user has broadened to include innovation and development practices in addition to the traditional consumer activities. As such, businesses must create opportunities for product development and innovation by the consumers. Frameworks of IT Prosumption for Business Development investigates the latest empirical research on active use of information technology resources, enabling users with new methodologies, tools, and opportunities to impact application development processes. The objective of this reference book is to mobilize end-users to take a more active role in their own IT solutions, which will in turn assist in the development of best practices in IT at all levels.

This book constitutes the refereed proceedings of the 11th IFIP WG 8.9 Working Conference on Research and Practical Issues of Enterprise Information Systems, CONFENIS 2017, held in Shanghai, China, in October 2017. The 17 full papers presented in this volume were carefully reviewed and selected from 39 submissions. They were organized in topical sections named: EIS concepts, theory and methods; IoT and emerging paradigm; EIS for industry 4.0; big data analytics; and intelligent electronics and systems for industrial IoT.

Business Object Design and Implementation III

Impact on Business and Society

Algorithms and Models for Network Data and Link Analysis

Analysis, Design and Practice with Onekey Coursecompass Access Card: Curtis, Business Information Systems5e

Business Information Systems

Data Science: New Issues, Challenges and Applications

This book constitutes the post conference proceedings of the 5th International IFIP Working

Conference on Research and Practical Issues of Enterprise Information Systems (CONFENIS 2011), held in Aalborg, Denmark, October 16-18, 2011. The 12 papers presented in this volume were carefully reviewed and selected from 103 submissions. The papers are organized in four sections on conceptualizing enterprise information systems; emerging topics in enterprise information systems; enterprise information systems as a service; and new perspectives on enterprise information systems. These papers are complemented by two keynotes and a short summary of the co-located Workshop on Future Enterprise Information Systems using Lego Serious Games.

This book constitutes the refereed proceedings of the Second International Conference on Electronic Government and the Information Systems Perspective, EGOVIS 2011, held in Toulouse, France, in August/September 2011. The 30 revised full papers presented were carefully reviewed and selected from numerous submissions. Among the topics addressed are aspects of security, reliability, privacy and anonymity of e-government systems, knowledge processing, service-oriented computing, and case studies of e-government systems in several countries.

Intelligent Decision Technologies 2017

Agricultural Supply Chains and Industry 4.0

BIS 2021 International Workshops, Virtual Event, June 14-17, 2021, Revised Selected Papers