

Process Mining Discovery Conformance And Enhancement Of Business Processes

Yeah, reviewing a ebook **Process Mining Discovery Conformance And Enhancement Of Business Processes** could grow your close connections listings. This is just one of the solutions for you to be successful. As understood, finishing does not recommend that you have fabulous points.

Comprehending as skillfully as understanding even more than additional will pay for each success. next-door to, the revelation as with ease as sharpness of this Process Mining Discovery Conformance And Enhancement Of Business Processes can be taken as with ease as picked to act.

*Business Process
Management Workshops* -
Marcello La Rosa
2013-01-26
This book constitutes
the refereed proceedings
of 12 international
workshops held in
Tallinn, Estonia, in

conjunction with the
10th International
Conference on Business
Process Management, BPM
2012, in September 2012.
The 12 workshops
comprised Adaptive Case
Management and Other
Non-Workflow Approaches

to BPM (ACM 2012), Business Process Design (BPD 2012), Business Process Intelligence (BPI 2012), Business Process Management and Social Software (BPMS2 2012), Data- and Artifact-Centric BPM (DAB 2012), Event-Driven Business Process Management (edBPM 2012), Empirical Research in Business Process Management (ER-BPM 2012), Process Model Collections (PMC 2012), Process-Aware Logistics Systems (PALS 2012), Reuse in Business Process Management (rBPM 2012), Security in Business Processes (SBP 2012), and Theory and Applications of Process Visualization (TAProViz 2012). The 56 revised full papers presented were carefully reviewed and selected from 141 submissions.

ICT for an Inclusive World - Youcef Baghdadi
2020-01-30

This book discusses the impact of information and communication technologies (ICTs) on organizations and on society as a whole. Specifically, it examines how such technologies improve our life and work, making them more inclusive through smart enterprises. The book focuses on how actors understand Industry 4.0 as well as the potential of ICTs to support organizational and societal activities, and how they adopt and adapt these technologies to achieve their goals. Gathering papers from various areas of organizational strategy, such as new business models, competitive strategies and knowledge management, the book covers a number of topics, including how innovative technologies improve the life of the individuals,

organizations, and societies; how social media can drive fundamental business changes, as their innovative nature allows for interactive communication between customers and businesses; and how developing countries can use these technologies in an innovative way. It also explores the impact of organizations on society through sustainable development and social responsibility, and how ICTs use social media networks in the process of value co-creation, addressing these issues from both private and public sector perspectives and on national and international levels, mainly in the context of technology innovations. Asia Pacific Business Process Management - Chun Ouyang 2014-06-28 This book constitutes

the proceedings of the Second Asia Pacific Conference on Business Process Management held in Brisbane, QLD, Australia, in July 2014. In all, 33 contributions from 12 countries were submitted. After each submission was reviewed by at least three Program Committee members, nine full papers were accepted for publication in this volume. These nine papers cover various topics that can be categorized under four main research focuses in BPM: process mining, process modeling and repositories, process model comparison, and process analysis.

Conformance Checking and Diagnosis in Process Mining

- Jorge Munoz-Gama 2016-11-22

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.

Process Mining in Healthcare - Ronny S. Mans 2015-03-12

What are the possibilities for process mining in hospitals? In this book the authors provide an answer to this question by presenting a healthcare reference model that outlines all the different classes of data that are potentially available for process mining in healthcare and the

relationships between them. Subsequently, based on this reference model, they explain the application opportunities for process mining in this domain and discuss the various kinds of analyses that can be performed. They focus on organizational healthcare processes rather than medical treatment processes. The combination of event data and process mining techniques allows them to analyze the operational processes within a hospital based on facts, thus providing a solid basis for managing and improving processes within hospitals. To this end, they also explicitly elaborate on data quality issues that are relevant for the data aspects of the healthcare reference model. This book mainly targets advanced

professionals involved in areas related to business process management, business intelligence, data mining, and business process redesign for healthcare systems as well as graduate students specializing in healthcare information systems and process analysis.

Business Process Management Workshops -

Ernest Teniente

2018-01-16

This book constitutes revised papers from the eleven International Workshops held at the 15th International Conference on Business Process Management, BPM 2017, in Barcelona, Spain, in September 2017: BPAI 2017 – 1st International Workshop on Business Process Innovation with Artificial Intelligence; BPI 2017 – 13th International Workshop on Business Process

Intelligence; BP-Meet-IoT 2017 – 1st International Workshop on Ubiquitous Business Processes Meeting Internet-of-Things; BPMS2 2017 – 10th Workshop on Social and Human Aspects of Business Process Management; - CBPM 2017 – 1st International Workshop on Cognitive Business Process Management; CCABPM 2017 – 1st International Workshop on Cross-cutting Aspects of Business Process Modeling; DeHMiMoP 2017 – 5th International Workshop on Declarative/Decision/Hybrid Mining & Modeling for Business Processes; QD-PA 2017 – 1st International Workshop on Quality Data for Process Analytics; REBPM 2017 – 3rd International Workshop on Interrelations between Requirements Engineering and Business Process

Management; SPBP 2017 – 1st Workshop on Security and Privacy-enhanced Business Process Management; TAProViz-PQ-IWPE 2017 –Joint International BPM 2017 Workshops on Theory and Application of Visualizations and Human-centric Aspects in Processes (TAProViz'17), Process Querying (PQ'17) and Process Engineering (IWPE17). The 44 full and 11 short papers presented in this volume were carefully reviewed and selected from 99 submissions.

Business Information Systems - Witold

Abramowicz 2015-06-15
This book contains the refereed proceedings of the 18th International Conference on Business Information Systems, BIS 2015, held in Poznań, Poland, in June 2015. The BIS conference series follows trends in academic and business research; thus, the

theme of the BIS 2015 conference was "Making Big Data Smarter." Big data is now a fairly mature concept, recognized and widely used by professionals in both research and industry. Together, they work on developing more adequate and efficient tools for data processing and analyzing, thus turning "big data" into "smart data." The 26 revised full papers were carefully reviewed and selected from 70 submissions. In addition, two invited papers are included in this book. They are grouped into sections on big and smart data, semantic technologies, content retrieval and filtering, business process management and mining, collaboration, enterprise architecture and business-IT alignment, specific BIS applications, and open

data for BIS.

Process Mining - Wil M. P. van der Aalst
2016-04-15

This is the second edition of Wil van der Aalst's seminal book on process mining, which now discusses the field also in the broader context of data science and big data approaches. It includes several additions and updates, e.g. on inductive mining techniques, the notion of alignments, a considerably expanded section on software tools and a completely new chapter of process mining in the large. It is self-contained, while at the same time covering the entire process-mining spectrum from process discovery to predictive analytics. After a general introduction to data science and process mining in Part I, Part II provides the basics of business process

modeling and data mining necessary to understand the remainder of the book. Next, Part III focuses on process discovery as the most important process mining task, while Part IV moves beyond discovering the control flow of processes, highlighting conformance checking, and organizational and time perspectives. Part V offers a guide to successfully applying process mining in practice, including an introduction to the widely used open-source tool ProM and several commercial products. Lastly, Part VI takes a step back, reflecting on the material presented and the key open challenges. Overall, this book provides a comprehensive overview of the state of the art in process mining. It is intended for business process analysts, business consultants,

process managers, graduate students, and BPM researchers.

Asia Pacific Business Process Management - Minseok Song 2013-10-18
This book constitutes the proceedings of the First Asia Pacific Conference on Business Process Management held in Beijing, China, in August 2013. In all, 19 contributions from seven countries were submitted. Following an extensive review process by an international Program Committee, seven full papers and one short paper were accepted for publication in this book and presentation at the conference. In addition, a keynote by Wil van der Aalst is also included.

Advanced Information Systems Engineering - Jelena Zdravkovic 2015-06-09
This book constitutes the proceedings of the 27th International

Conference on Advanced Information Systems Engineering, CAiSE 2015, held in Stockholm, Sweden, in June 2015. The 31 papers presented in this volume were carefully reviewed and selected from 236 submissions. They were organized in topical sections named: social and collaborative computing; business process modeling and languages; high volume and complex information management; requirements elicitation and management; enterprise data management; model conceptualisation and evolution; process mining, monitoring and predicting; intra- and inter-organizational process engineering; process compliance and alignment; enterprise IT integration and management; and service science and computing. The book also contains the abstracts of 3

keynote speeches and 5 tutorials, presented at the conference.

Process Mining Handbook

- Wil M. P. van der Aalst 2022-06-27

This is an open access book. This book comprises all the single courses given as part of the First Summer School on Process Mining, PMSS 2022, which was held in Aachen, Germany, during July 4-8, 2022. This volume contains 17 chapters organized into the following topical sections: Introduction; process discovery; conformance checking; data preprocessing; process enhancement and monitoring; assorted process mining topics; industrial perspective and applications; and closing.

Advanced Information Systems Engineering

- Jolita Ralyté 2012-07-16

This book constitutes the refereed proceedings of the 24th

International Conference on Advanced Information Systems Engineering, CAiSE 2012, held in Gdansk, Poland, in June 2012. The 42 revised full papers, 2 full-length invited papers and 4 short tutorial papers, were carefully reviewed and selected from 297 submissions. The contributions have been grouped into the following topical sections: business process model analysis; service and component composition; language and models; system variants and configuration; process mining; ontologies; requirements and goal models; compliance; monitoring and prediction; services; case studies; business process design; feature models and product lines; and human factors.

Encyclopedia of Business Analytics and

Optimization - Wang, John 2014-02-28

As the age of Big Data emerges, it becomes necessary to take the five dimensions of Big Data- volume, variety, velocity, volatility, and veracity- and focus these dimensions towards one critical emphasis - value. The Encyclopedia of Business Analytics and Optimization confronts the challenges of information retrieval in the age of Big Data by exploring recent advances in the areas of knowledge management, data visualization, interdisciplinary communication, and others. Through its critical approach and practical application, this book will be a must-have reference for any professional, leader, analyst, or manager interested in making the most of the knowledge resources at their disposal.

Robust Process Mining
with Guarantees - Sander

J. J. Leemans 2022-03-29

This book presents techniques for process discovery, conformance checking and enhancement. For process discovery, it introduces the Inductive Miner framework: a recursive skeleton for discovery techniques that in itself provides several guarantees. The framework is instantiated in several concrete discovery techniques, each of which targets a specific challenge of process discovery, such as incompleteness of information or noisy behavior. For conformance checking, it introduces the Projected Conformance Checking framework, which focuses on speed, but nevertheless provides several guarantees, such as that for certain classes of models, it

can decide language equivalence. For enhancement, it introduces the Inductive visual Miner, a well-polished end-user focused tool that includes process discovery, conformance checking and that can visualize performance on a discovered model, all without any user input.

CONCUR 2011 --

Concurrency Theory -

Joost-Pieter Katoen

2011-08-27

This book constitutes the refereed proceedings of the 22nd International Conference on Concurrency Theory, CONCUR 2011, held in Aachen, Germany, September 5-10, 2011. The 32 revised full papers were carefully reviewed and selected from 94 submissions. The papers are organized in topics such as real-time systems, probabilistic systems, automata, separation logic, π -

calculus, Petri nets, process algebra and modeling, verification, games, and bisimulation. *Interactive Process Mining in Healthcare* - Carlos Fernandez-Llatas 2020-10-28

This book provides a practically applicable guide to the methodologies and technologies for the application of interactive process mining paradigm. Case studies are presented where this paradigm has been successfully applied in emergency medicine, surgery processes, human behavior modelling, strokes and outpatients' services, enabling the reader to develop a deep understanding of how to apply process mining technologies in healthcare to support them in inferring new knowledge from past actions, and providing accurate and

personalized knowledge to improve their future clinical decision-making. *Interactive Process Mining in Healthcare* comprehensively covers how machine learning algorithms can be utilized to create real scientific evidence to improve daily healthcare protocols, and is a valuable resource for a variety of health professionals seeking to develop new methods to improve their clinical decision-making.

Business Intelligence - Esteban Zimányi 2014-03-20

To large organizations, business intelligence (BI) promises the capability of collecting and analyzing internal and external data to generate knowledge and value, thus providing decision support at the strategic, tactical, and operational levels. BI is now impacted by the

“Big Data” phenomena and the evolution of society and users. In particular, BI applications must cope with additional heterogeneous (often Web-based) sources, e.g., from social networks, blogs, competitors’, suppliers’, or distributors’ data, governmental or NGO-based analysis and papers, or from research publications. In addition, they must be able to provide their results also on mobile devices, taking into account location-based or time-based environmental data. The lectures held at the Third European Business Intelligence Summer School (eBISS), which are presented here in an extended and refined format, cover not only established BI and BPM technologies, but extend into innovative aspects

that are important in this new environment and for novel applications, e.g., pattern and process mining, business semantics, Linked Open Data, and large-scale data management and analysis. Combining papers by leading researchers in the field, this volume equips the reader with the state-of-the-art background necessary for creating the future of BI. It also provides the reader with an excellent basis and many pointers for further research in this growing field.

Conformance Checking - Josep Carmona 2018-11-11
This book introduces readers to the field of conformance checking as a whole and outlines the fundamental relation between modelled and recorded behaviour. Conformance checking interrelates the modelled and recorded behaviour of a given

process and provides techniques and methods for comparing and analysing observed instances of a process in the presence of a model, independent of the model's origin. Its goal is to provide an overview of the essential techniques and methods in this field at an intuitive level, together with precise formalisations of its underlying principles. The book is divided into three parts, that are meant to cover different perspectives of the field of conformance checking. Part I presents a comprehensive yet accessible overview of the essential concepts used to interrelate modelled and recorded behaviour. It also serves as a reference for assessing how conformance checking efforts could be applied in specific domains. Next, Part II provides

readers with detailed insights into algorithms for conformance checking, including the most commonly used formal notions and their instantiation for specific analysis questions. Lastly, Part III highlights applications that help to make sense of conformance checking results, thereby providing a necessary next step to increase the value of a given process model. They help to interpret the outcomes of conformance checking and incorporate them by means of enhancement and repair techniques. Providing the core building blocks of conformance checking and describing its main applications, this book mainly addresses students specializing in business process management, researchers entering process mining and conformance checking

for the first time, and advanced professionals whose work involves process evaluation, modelling and optimization.

BPM - Driving Innovation in a Digital World - Jan vom Brocke 2015-02-21

This book shows how business process management (BPM), as a management discipline at the intersection of IT and Business, can help organizations to master digital innovations and transformations. At the same time, it discusses how BPM needs to be further developed to successfully act as a driver for innovation in a digital world. In recent decades, BPM has proven extremely successful in managing both continuous and radical improvements in many sectors and business areas. While the digital age brings tremendous new opportunities, it also

brings the specific challenge of correctly positioning and scoping BPM in organizations. This book shows how to leverage BPM to drive business innovation in the digital age. It brings together the views of the world's leading experts on BPM and also presents a number of practical cases. It addresses managers as well as academics who share an interest in digital innovation and business process management. The book covers topics such as BPM and big data, BPM and the Internet of Things, and BPM and social media. While these technological and methodological aspects are key to BPM, process experts are also aware that further nontechnical organizational capabilities are required for successful innovation. The ideas

presented in this book have helped us a lot while implementing process innovations in our global Logistics Service Center. Joachim Gantner, Director IT Services, Swarovski AG Managing Processes – everyone talks about it, very few really know how to make it work in today’s agile and competitive world. It is good to see so many leading experts taking on the challenge in this book. Cornelius Clauser, Chief Process Officer, SAP SE This book provides worthwhile readings on new developments in advanced process analytics and process modelling including practical applications – food for thought how to succeed in the digital age. Ralf Diekmann, Head of Business Excellence, Hilti AG This book is as an important step towards process

innovation systems. I very much like to congratulate the editors and authors for presenting such an impressive scope of ideas for how to address the challenging, but very rewarding marriage of BPM and innovation. Professor Michael Rosemann, Queensland University of Technology
Advances in Production Management Systems. The Path to Digital Transformation and Innovation of Production Management Systems -
Bojan Lalic 2020-08-25
The two-volume set IFIP AICT 591 and 592 constitutes the refereed proceedings of the International IFIP WG 5.7 Conference on Advances in Production Management Systems, APMS 2020, held in Novi Sad, Serbia, in August/September 2020. The 164 papers presented were carefully reviewed and selected from 199

submissions. They discuss globally pressing issues in smart manufacturing, operations management, supply chain management, and Industry 4.0. The papers are organized in the following topical sections: Part I: advanced modelling, simulation and data analytics in production and supply networks; advanced, digital and smart manufacturing; digital and virtual quality management systems; cloud-manufacturing; cyber-physical production systems and digital twins; IIOT interoperability; supply chain planning and optimization; digital and smart supply chain management; intelligent logistics networks management; artificial intelligence and blockchain technologies in logistics and DSN; novel production

planning and control approaches; machine learning and artificial intelligence; connected, smart factories of the future; manufacturing systems engineering: agile, flexible, reconfigurable; digital assistance systems: augmented reality and virtual reality; circular products design and engineering; circular, green, sustainable manufacturing; environmental and social lifecycle assessments; socio-cultural aspects in production systems; data-driven manufacturing and services operations management; product-service systems in DSN; and collaborative design and engineering Part II: the Operator 4.0: new physical and cognitive evolutionary paths; digital transformation approaches in production management; digital

transformation for more sustainable supply chains; data-driven applications in smart manufacturing and logistics systems; data-driven services: characteristics, trends and applications; the future of lean thinking and practice; digital lean manufacturing and its emerging practices; new reconfigurable, flexible or agile production systems in the era of industry 4.0; operations management in engineer-to-order manufacturing; production management in food supply chains; gastronomic service system design; product and asset life cycle management in the circular economy; and production ramp-up strategies for product

Research Challenges in Information Science - Renata Guizzardi
2022-05-13
This book constitutes

the proceedings of the 16th International Conference on Research Challenges in Information Sciences, RCIS 2022, which took place in Barcelona, Spain, during May 17–20, 2022. It focused on the special theme "Ethics and Trustworthiness in Information Science". The scope of RCIS is summarized by the thematic areas of information systems and their engineering; user-oriented approaches; data and information management; business process management; domain-specific information systems engineering; data science; information infrastructures, and reflective research and practice. The 35 full papers presented in this volume were carefully reviewed and selected from a total 100 submissions. The 18 Forum papers are based

on 11 Forum submissions, from which 5 were selected, and the remaining 13 were transferred from the regular submissions. The 6 Doctoral Consortium papers were selected from 10 submissions to the consortium. The contributions were organized in topical sections named: Data Science and Data Management; Information Search and Analysis; Business Process Management; Business Process Mining; Digital Transformation and Smart Life; Conceptual Modelling and Ontologies; Requirements Engineering; Model-Driven Engineering; Machine Learning Applications. In addition, two-page summaries of the tutorials can be found in the back matter.

Enterprise, Business-Process and Information Systems Modeling -

Khaled Gaaloul 2015
This book contains the refereed proceedings of the 16th International Conference on Business Process Modeling, Development and Support, BPMDS 2015, and the 20th International Conference on Exploring Modeling Methods for Systems Analysis and Design, EMMSAD 2015, held together with the 27th International Conference on Advanced Information Systems Engineering (CAiSE 2015) in Stockholm, Sweden, in June 2015. The 17 full papers accepted for BPMDS were selected from 43 submissions and cover a wide spectrum of issues related to business process development, modeling, and support. They are grouped into topical sections on enabling value creation, human-centric paradigms, mining for processes, declarative approaches,

understanding and sharing, quality and security issues, and new areas for BPMDS. The 12 full and three short papers accepted for EMMSAD were chosen from 33 submissions and focus on exploring, evaluating, and enhancing modeling methods and methodologies for the analysis and design of information systems, enterprises, and business processes. They are grouped into topical sections on fundamental issues in modeling, requirements and regulations, enterprise and software ecosystem modeling, information and process model quality, meta-modeling and domain-specific modeling and model composition, modeling of architecture and design, and novel applications of modeling.

Robust Process Mining with Guarantees - Sander

J. J. Leemans 2022-03-25
This book presents techniques for process discovery, conformance checking and enhancement. For process discovery, it introduces the Inductive Miner framework: a recursive skeleton for discovery techniques that in itself provides several guarantees. The framework is instantiated in several concrete discovery techniques, each of which targets a specific challenge of process discovery, such as incompleteness of information or noisy behavior. For conformance checking, it introduces the Projected Conformance Checking framework, which focuses on speed, but nevertheless provides several guarantees, such as that for certain classes of models, it can decide language equivalence. For

enhancement, it introduces the Inductive visual Miner, a well-polished end-user focused tool that includes process discovery, conformance checking and that can visualize performance on a discovered model, all without any user input.

Human-Centered Software Engineering - Stefan Sauer 2014-09-02

This book constitutes the refereed proceedings of the 5th IFIP WG 13.2 International Conference on Human-Centered Software Engineering, HCSE 2014, held in Paderborn, Germany, in September 2014. The 13 full papers and 10 short papers presented together with one keynote were carefully reviewed and selected from 35 submissions. The papers cover various topics such as integration of software engineering and user-centered design; HCI

models and model-driven engineering; incorporating guidelines and principles for designing usable products in the development process; usability engineering; methods for user interface design; patterns in HCI and HCSE; software architectures for user interfaces; user interfaces for special environments; representations for design in the development process; working with iterative and agile process models in HCSE; social and organizational aspects in the software development lifecycle; human-centric software development tools; user profiles and mental models; user requirements and design constraints; and user experience and software design.

Enterprise, Business-

Process and Information Systems Modeling -

Selmin Nurcan 2013-06-20

This book contains the refereed proceedings of the 14th International Conference on Business Process Modeling, Development and Support (BPMDS 2013) and the 18th International Conference on Exploring Modeling Methods for Systems Analysis and Design (EMMSAD 2013), held together with the 25th International Conference on Advanced Information Systems Engineering (CAiSE 2013) in Valencia, Spain, in June 2013. The 15 full papers, two experience reports, and three idea papers accepted for BPMDS were selected from 54 submissions and cover a wide spectrum of issues related to business process development, modeling, and support. They are grouped into sections on innovative

representations for knowledge-intensive processes; business process management in practice; analysis of business process models; model-based business process analysis; flexible business process management; improvement and change patterns; and process model repositories . The 10 full and 2 short papers accepted for EMMSAD were chosen from 27 submissions and focus on exploring, evaluating, and enhancing current information modeling methods and methodologies. They are grouped in sections on advanced modelling; capturing design knowledge; method engineering; modelling process; specialized modelling; and modelling experiences.

Digital Transformation -

Birgit Vogel-Heuser
2023-02-02

Digital Transformation in Industry 4.0/5.0 requires the effective and efficient application of digitalization technologies in the area of production systems. This book elaborates on concepts, techniques, and technologies from computer science in the context of Industry 4.0/5.0 and demonstrates their possible applications. Thus, the book serves as an orientation but also as a reference work for experts in the field of Industry 4.0/5.0 to successfully advance digitization in their companies.

Data-Driven Process Discovery and Analysis - Paolo Ceravolo
2015-02-21

This book constitutes the thoroughly refereed proceedings of the Third International Symposium on Data-Driven Process Discovery and Analysis

held in Riva del Garda, Italy, in August 2013. The six revised full papers were carefully selected from 18 submissions. Following the event, authors were given the opportunity to improve their papers with the insights they gained from the symposium. The selected papers cover theoretical issues related to process representation, discovery and analysis or provide practical and operational experiences in process discovery and analysis.

E-Commerce and Web Technologies - Christian Huemer
2011-08-19

This book constitutes the refereed proceedings of the 12th International Conference on Electronic Commerce and Web Technologies (EC-Web) held in Toulouse, France, in August/September 2011. The 25 papers accepted for EC-Web, selected

from 60 submissions, are organized into eight topical sections on semantic services, business processes and services, context-aware recommender systems, intelligent agents and e-negotiation systems, collaborative filtering and preference learning, social recommender systems, agent interaction and trust management, and innovative strategies for preference elicitation and profiling.

Data-Driven Process Discovery and Analysis -

Karl Aberer 2013-11-19
This book constitutes the thoroughly refereed proceedings of the First International Symposium on Data-Driven Process Discovery and Analysis held in Campione d'Italia, Italy, in June/July 2011. The 11 revised full papers were carefully selected from 31 submissions. In

addition to the thorough review process, the lively discussions at the event itself also helped the authors to improve their papers and to foster interesting extensions. The selected papers cover a wide range of topics spanning from theoretical issues related to process representation to practical experience in process discovery and analysis.

Process Mining in Action
- Lars Reinkemeyer
2020-03-14

This book describes process mining use cases and business impact along the value chain, from corporate to local applications, representing the state of the art in domain know-how. Providing a set of industrial case studies and best practices, it complements academic publications on the topic. Further the book

reveals the challenges and failures in order to offer readers practical insights and guidance on how to avoid the pitfalls and ensure successful operational deployment. The book is divided into three parts: Part I provides an introduction to the topic from fundamental principles to key success factors, and an overview of operational use cases. As a holistic description of process mining in a business environment, this part is particularly useful for readers not yet familiar with the topic. Part II presents detailed use cases written by contributors from a variety of functions and industries. Lastly, Part III provides a brief overview of the future of process mining, both from academic and operational perspectives. Based on a

solid academic foundation, process mining has received increasing interest from operational businesses, with many companies already reaping the benefits. As the first book to present an overview of successful industrial applications, it is of particular interest to professionals who want to learn more about the possibilities and opportunities this new technology offers. It is also a valuable resource for researchers looking for empirical results when considering requirements for enhancements and further developments.

Business Process

Management - Alistair Barros 2012-08-27

This book constitutes the proceedings of the 10th International Conference on Business Process Management, BPM 2012, held in Tallinn,

Estonia, in September 2012. The 17 regular papers and 7 short papers included in this volume were carefully reviewed and selected from 126 submissions. The book also features two keynote lectures which were given at the conference. The papers are organized in topical sections named: process quality; conformance and compliance; BPM applications; process model analysis; BPM and the cloud; requirements and performance; process mining; and refactoring and optimization.

Intelligent Information and Database Systems -

Paweł Sitek 2020-03-03

This volume constitutes the refereed proceedings of the 12th Asian Conference on

Intelligent Information and Database Systems, ACIIDS 2020, held in Phuket, Thailand, in March 2020. The total of 50 full papers accepted

for publication in these proceedings were carefully reviewed and selected from 180 submissions. The papers are organized in the following topical sections: □advanced big data, machine learning and data mining; industry applications of intelligent methods and systems; artificial intelligence, optimization, and databases in practical applications; intelligent applications of internet of things; recommendation and user centric applications of intelligent systems.

Business Process Management Workshops -

Florian Daniel

2012-01-25

LNBIP 99 and LNBIP 100 together constitute the thoroughly refereed proceedings of 12 international workshops held in Clermont-Ferrand, France, in conjunction with the 9th

International Conference on Business Process Management, BPM 2011, in August 2011. The 12 workshops focused on Business Process Design (BPD 2011), Business Process Intelligence (BPI 2011), Business Process Management and Social Software (BPMS2 2011), Cross-Enterprise Collaboration (CEC 2011), Empirical Research in Business Process Management (ER-BPM 2011), Event-Driven Business Process Management (edBPM 2011), Process Model Collections (PMC 2011), Process-Aware Logistics Systems (PALS 2011), Process-Oriented Systems in Healthcare (ProHealth 2011), Reuse in Business Process Management (rBPM 2011), Traceability and Compliance of Semi-Structured Processes (TC4SP 2011), and Workflow Security Audit and Certification (WfSAC 2011). In addition, the

proceedings also include the Process Mining Manifesto (as an Open Access Paper), which has been jointly developed by more than 70 scientists, consultants, software vendors, and end-users. LNBIP 99 contains the revised and extended papers from BPD 2011, BPI 2011 (including the Process Mining Manifesto), BPMS2 2011, CEC 2011, ER-BPM 2011, and edBPM 2011. **Process Mining** - Wil van der Aalst 2014-10-07
More and more information about business processes is recorded by information systems in the form of so-called "event logs". Despite the omnipresence of such data, most organizations diagnose problems based on fiction rather than facts. Process mining is an emerging discipline based on process model-driven approaches and data mining. It not only

allows organizations to fully benefit from the information stored in their systems, but it can also be used to check the conformance of processes, detect bottlenecks, and predict execution problems. Wil van der Aalst delivers the first book on process mining. It aims to be self-contained while covering the entire process mining spectrum from process discovery to operational support. In Part I, the author provides the basics of business process modeling and data mining necessary to understand the remainder of the book. Part II focuses on process discovery as the most important process mining task. Part III moves beyond discovering the control flow of processes and highlights conformance checking, and organizational and time perspectives. Part

IV guides the reader in successfully applying process mining in practice, including an introduction to the widely used open-source tool ProM. Finally, Part V takes a step back, reflecting on the material presented and the key open challenges. Overall, this book provides a comprehensive overview of the state of the art in process mining. It is intended for business process analysts, business consultants, process managers, graduate students, and BPM researchers.

Applications and Developments in Semantic Process Mining - Okoye, Kingsley 2020-04-10

As technology becomes increasingly intelligent, various factors within the field of data science are seeing significant transformation. Process analysis is one area

that is undergoing substantial development due to the implementation of semantic reasoning and web technologies. The congruence of these two systems has created various applications and developments in data processing and analysis across several professional fields. Applications and Developments in Semantic Process Mining is an essential reference source that discusses the improvement of process mining algorithms through the implementation of semantic modeling and representation. Featuring research on topics such as domain ontologies, fuzzy modeling, and information extraction, the book takes into account the different stages of process mining and its application in real time and then

expounds the classical process mining techniques to semantical preparation of the extracted models for further analysis and querying at a more abstract level. The book provides a wide-ranging idea of the application and development of semantic process mining that is expected to be beneficial and used by professionals, software and data engineers, software developers, IT experts, business owners and entrepreneurs, and process analysts.

Process Mining - Wil van der Aalst 2011-07-16

More and more information about business processes is recorded by information systems in the form of so-called "event logs". Despite the omnipresence of such data, most organizations diagnose problems based on fiction rather than facts. Process mining is

an emerging discipline based on process model-driven approaches and data mining. It not only allows organizations to fully benefit from the information stored in their systems, but it can also be used to check the conformance of processes, detect bottlenecks, and predict execution problems. Wil van der Aalst delivers the first book on process mining. It aims to be self-contained while covering the entire process mining spectrum from process discovery to operational support. In Part I, the author provides the basics of business process modeling and data mining necessary to understand the remainder of the book. Part II focuses on process discovery as the most important process mining task. Part III moves beyond discovering the control flow of

processes and highlights conformance checking, and organizational and time perspectives. Part IV guides the reader in successfully applying process mining in practice, including an introduction to the widely used open-source tool ProM. Finally, Part V takes a step back, reflecting on the material presented and the key open challenges. Overall, this book provides a comprehensive overview of the state of the art in process mining. It is intended for business process analysts, business consultants, process managers, graduate students, and BPM researchers.

Fundamental Approaches to Software Engineering

- Juan de Lara

2012-03-22

This book constitutes the refereed proceedings of the 15th International Conference

on Fundamental Approaches to Software Engineering, FASE 2012, held in Tallinn, Estonia, in March/April 2012, as part of ETAPS 2012, the European Joint Conferences on Theory and Practice of Software. The 33 full papers presented together with one full length invited talk were carefully reviewed and selected from 134 submissions. The papers are organized in topical sections on software architecture and components, services, verification and monitoring, intermodelling and model transformations, modelling and adaptation, product lines and feature-oriented programming, development process, verification and synthesis, testing and maintenance, and slicing and refactoring.

Enterprise, Business-

Process and Information Systems Modeling - Jens Gulden 2018-06-04

This book constitutes the proceedings of two events held at the CAiSE conference and relating to the areas of enterprise, business process and information systems modeling: The 19th International Conference on Business Process Modeling, Development and Support, BPMDS 2018, and the 23rd International Conference on Evaluation and Modeling Methods for Systems Analysis and Development, EMMSAD 2018. The conferences took place in Tallinn, Estonia, in June 2018. The 13 papers accepted for BPMDS were carefully reviewed and selected from 29 submissions; for EMMSAD 6 papers out of 13 submissions were accepted for publication. For BPMDS 2018, the papers were organized in topical

sections as follows: context-awareness in business processes; automatic analysis of business processes; advanced approaches for business process modeling; evaluation of business process modeling techniques; an experience report on modeling collaborative processes. For EMMSAD 2018, the six related papers are listed without further sections.

Advances in Information and Communication -

Kohei Arai 2022-03-11
The book "Advances in Information and Communication Networks - Proceedings of the 2022 Future of Information and Communication Conference (FICC)" aims in presenting the latest research advances, sharing expert knowledge and exchanging ideas with the common goal of shaping the future of Information and

Communication. The conference attracted 402 submissions, of which, 131 submissions (including six poster papers) have been selected through a double-blind review process by an international panel of expert referees. This book discusses on aspects of Communication, Data Science, Ambient Intelligence, Networking, Computing, Security and Internet of Things, from classical to intelligent scope. The intention is to help academic pioneering researchers, scientists, industrial engineers, and students become familiar with and stay abreast of the ever-changing technology surrounding their industry. We hope that readers find the volume interesting and valuable; it gathers chapters addressing

state-of-the-art intelligent methods and techniques for solving real world problems along with a vision of the future research.

Process Mining Techniques in Business Environments - Andrea

Burattin 2015-05-12

After a brief presentation of the state of the art of process-mining techniques, Andrea Burratin proposes different scenarios for the deployment of process-mining projects, and in particular a

characterization of companies in terms of their process awareness. The approaches proposed in this book belong to two different computational paradigms: first to classic "batch process mining," and second to more recent "online process mining." The book encompasses a revised version of the author's PhD thesis, which won the "Best Process Mining Dissertation Award" in 2014, awarded by the IEEE Task Force on Process Mining.