Intelligent Paradigms For Healthcare Enterprises Systems Thinking Studies In Fuzziness And Soft Computing

Handbook of Research on Advanced Techniques in Diagnostic Imaging and Biomedical ApplicationsCompeting in the Age of AICognitive Hyperconnected Digital TransformationInformation Resources ManagementCognitive PatternsIntelligent Systems ReportEdge Computing and Computational Intelligence Paradigms for the IoTA Paradigm Shift in Health Care Information SystemsTelescopic Hydraulic Gantry SystemsGuide to Ambient Intelligence in the IoT EnvironmentReal-Time Structured MethodsIntelligent Information TechnologiesInnovation in Medicine and Healthcare Systems, and MultimediaIntelligent Computing, Communication and DevicesHealth Data in the Information SocietyHandbook of Research on Developments in E-health and TelemedicineValue by DesignIntelligent Paradigms for Healthcare EnterprisesEnterprise AnalyticsIntelligent EnterpriseIntelligent Decision Support Systems—A Journey to Smarter HealthcareHealth Care Technology: Innovating clinical care through technologySuccessful Case-based Reasoning Applications-2Advanced Computational Intelligence Paradigms in Healthcare 6Flow Shop Lot StreamingThe Digital Twin Paradigm for Smarter Systems and Environments: the Industry Use CasesAdvanced Computational Intelligence

Paradigms in Healthcare 5Exploring Enterprise Service Bus in the Service-Oriented Architecture ParadigmCross-Disciplinary Advances in Human Computer Interaction: User Modeling, Social Computing, and Adaptive InterfacesDeutsche NationalbibliografieIntelligent EnterpriseAdvanced Computational Intelligence Paradigms in Healthcare - 1Applications and Innovations in Intelligent Systems XIIIIntegrating Information Technology and Management for Quality of CareRecent Advances in Knowledge-based Paradigms and ApplicationsAmerican Book Publishing RecordWorkflow ModelingThe Intelligent Enterprise in the Era of Big DataInnovation ManagementDictionary of Health Information Technology and Security

Handbook of Research on Advanced Techniques in Diagnostic Imaging and Biomedical Applications

Edge computing is focused on devices and technologies that are attached to the internet of things (IoT). Identifying IoT use across a range of industries and measuring strategic values helps identify what technologies to pursue and can avoid wasted resources on deployments with limited values. Edge Computing and Computational Intelligence Paradigms for the IoT is a critical research book that provides a complete insight on the recent advancements and integration of intelligence in IoT. This book highlights various topics such as disaster prediction,

governance, and healthcare. It is an excellent resource for researchers, working professionals, academicians, policymakers, and defense companies.

Competing in the Age of AI

This book presents carefully selected contributions devoted to the modern perspective of AI research and innovation. This collection covers several areas of applications and motivates new research directions. The theme across all chapters combines several domains of AI research, Computational Intelligence and Machine Intelligence including an introduction to the recent research and models. Each of the subsequent chapters reveals leading edge research and innovative solution that employ AI techniques with an applied perspective. The problems include classification of spatial images, early smoke detection in outdoor space from video images, emergent segmentation from image analysis, intensity modification in images, multi-agent modeling and analysis of stress. They all are novel pieces of work and demonstrate how AI research contributes to solutions for difficult real world problems that benefit the research community, industry and society.

Cognitive Hyperconnected Digital Transformation

Case-based reasoning paradigms offer automatic reasoning capabilities which are

useful for the implementation of human like machines in a limited sense. This research book is the second volume in a series devoted to presenting Case-based reasoning (CBR) applications. The first volume, published in 2010, testified the flexibility of CBR, and its applicability in all those fields where experiential knowledge is available. This second volume further witnesses the heterogeneity of the domains in which CBR can be exploited, but also reveals some common directions that are clearly emerging in recent years. This book will prove useful to the application engineers, scientists, professors and students who wish to develop successful case-based reasoning applications.

Information Resources Management

Web browsing would not be what it is today without the use of Service-Oriented Architecture (SOA). Although much has been written about SOA methodology, this emerging platform is continuously under development. Exploring Enterprise Service Bus in the Service-Oriented Architecture Paradigm is a detailed reference source that examines current aspects and research methodologies that enable enterprise service bus to unify and connect services efficiently on a common platform. Featuring relevant topics such as SOA reference architecture, grid computing applications, complex event computing, and java business integration, this is an ideal resource for all practitioners, academicians, graduate students, and researchers interested in the discoveries on the relationship that Service-Oriented

architecture and enterprise service bus share.

Cognitive Patterns

"This work is a comprehensive, four-volume reference addressing major issues, trends, and areas for advancement in information management research, containing chapters investigating human factors in IT management, as well as IT governance, outsourcing, and diffusion"--Provided by publisher.

Intelligent Systems Report

"This collection compiles research to drive further evolution and innovation of these next-generation technologies and their applications, of which the scientific, technological, and commercial communities have only begun to scratch the surface. It is an essential reference acquisition for any library seeking to cover the leading edge of technological innovations"--Provided by publisher.

Edge Computing and Computational Intelligence Paradigms for the IoT

"International Institute for Analytics"--Dust jacket.

A Paradigm Shift in Health Care Information Systems

This volume presents the latest research in Virtual Reality (VR), as it is being applied in psychotherapy, rehabilitation, and the analysis of behaviour for neurological assessment. This book will be of value to anyone already in the field and to those who are interested in the development of VR systems for therapeutic purposes. The contents include: · The latest literature reviews on VR in psychotherapy, psychological wellbeing, and rehabilitation · VR and cognitive behavior therapy · Increasing presence in VR for effective exposure therapy and treatment of anxiety disorders · VR military training for managing combat stress and preventing post traumatic stress · VR, mixed reality systems, and games for stroke rehabilitation · VR systems for improving vision in children with amblyopia · Therapeutic play in virtual environments · Healing potential of online virtual worlds such as Second Life · Neuropsychological assessment using virtual environments · Detailed accounts on how VR systems are designed, implemented, and best evaluated · Discussions of limitations, problems, and ethical concerns using VR in mental and physical therapy

Telescopic Hydraulic Gantry Systems

Ambient intelligence (AmI) is an element of pervasive computing that brings

smartness to living and business environments to make them more sensitive, adaptive, autonomous and personalized to human needs. It refers to intelligent interfaces that recognise human presence and preferences, and adjust smart environments to suit their immediate needs and requirements. The key factor is the presence of intelligence and decision-making capabilities in IoT environments. The underlying technologies include pervasive computing, ubiquitous communication, seamless connectivity of smart devices, sensor networks, artificial intelligence (AI), machine learning (ML) and context-aware human-computer interaction (HCI). AmI applications and scenarios include smart homes, autonomous self-driving vehicles, healthcare systems, smart roads, the industry sector, smart facilities management, the education sector, emergency services, and many more. The advantages of AmI in the IoT environment are extensive. However, as for any new technological paradigm, there are also many open issues and limitations. This book discusses the AmI element of the IoT and the relevant principles, frameworks, and technologies in particular, as well as the benefits and inherent limitations. It reviews the state of the art of current developments relating to smart spaces and AmI-based IoT environments. Written by leading international researchers and practitioners, the majority of the contributions focus on device connectivity, pervasive computing and context modelling (including communication, security, interoperability, scalability, and adaptability). The book presents cutting-edge research, current trends, and case studies, as well as suggestions to further our understanding and the development and enhancement

of the AmI-IoT vision.

Guide to Ambient Intelligence in the IoT Environment

"This book develops new models and methodologies for describing user behavior, analyzing their needs and expectations and thus successfully designing user friendly systems"--Provided by publisher.

Real-Time Structured Methods

The Digital Twin Paradigm for Smarter Systems and Environments: The Industry Use Cases, Volume 117, the latest volume in the Advances in Computers series, presents detailed coverage of new advancements in computer hardware, software, theory, design and applications. Chapters vividly illustrate how the emerging discipline of digital twin is strategically contributing to various digital transformation initiatives. Specific chapters cover Demystifying the Digital Twin Paradigm, Digital Twin Technology for "Smarter Manufacturing", The Fog Computing/ Edge Computing to leverage Digital Twin, The industry use cases for the Digital Twin idea, Enabling Digital Twin at the Edge, The Industrial Internet of Things (IIOT), and much more. Provides in-depth descriptions of digital transformation technologies and tools Covers various research accomplishments in

this flourishing field of relevance Includes many detailed industry use cases with all the right information

Intelligent Information Technologies

In the history of mankind, three revolutions which impact the human life are tool-making revolution, agricultural revolution and industrial revolution. They have transformed not only the economy and civilization but the overall development of the human society. Probably, intelligence revolution is the next revolution, which the society will perceive in the next 10 years. ICCD-2014 covers all dimensions of intelligent sciences, i.e. Intelligent Computing, Intelligent Communication and Intelligent Devices. This volume covers contributions from Intelligent Computing, areas such as Intelligent and Distributed Computing, Intelligent Grid & Cloud Computing, Internet of Things, Soft Computing and Engineering Applications, Data Mining and Knowledge discovery, Semantic and Web Technology, and Bio-Informatics. This volume also covers paper from Intelligent Device areas such as Embedded Systems, RFID, VLSI Design & Electronic Devices, Analog and Mixed-Signal IC Design and Testing, Solar Cells and Photonics, Nano Devices and Intelligent Robotics.

Innovation in Medicine and Healthcare Systems, and

Multimedia

Value by Design is a practical guide for real-world improvement in clinical microsystems. Clinical microsystem theory, as implemented by the Institute for Healthcare Improvement and health care organizations nationally and internationally, is the foundation of high-performing front line health care teams who achieve exceptional quality and value. These authors combine theory and principles to create a strategic framework and field-tested tools to assess and improve systems of care. Their approach links patients, families, health care professionals and strategic organizational goals at all levels of the organization: micro, meso and macrosystem levels to achieve the ultimate quality and value a health care system is capable of offering.

Intelligent Computing, Communication and Devices

The goal of this book is to provide, in a friendly and refreshing manner, both theoretical concepts and practical techniques for the important and exciting field of Artificial Intelligence that can be directly applied to real-world healthcare problems. Healthcare – the final frontier. Lately, it seems like Pandora opened the box and evil was released into the world. Fortunately, there was one thing left in the box: hope. In recent decades, hope has been increasingly represented by Intelligent

Decision Support Systems. Their continuing mission: to explore strange new diseases, to seek out new treatments and drugs, and to intelligently manage healthcare resources and patients. Hence, this book is designed for all those who wish to learn how to explore, analyze and find new solutions for the most challenging domain of all time: healthcare.

Health Data in the Information Society

This compendium brings together leading researchers in the fields of Intelligent Systems and healthcare aiming at medical engineers, healthcare managers and computer scientists worldwide. This book is an overview of intelligent paradigms and strategic investments that might payoff for the healthcare enterprise. Specifically, the reader will get ideas for efficiency enhancements for improving effectiveness and quality of care and for increasing patient safety. "Advanced Intelligent Paradigms in Healthcare" straddles technologic topics from DNA processing and automating medical second opinions in the lab, to telemedicine and chat spaces for rural patient outreach, among many others. In terms of management concerns, this book also explores systems approaches such as automated clinical guidelines, institutional workflow management, and best practices and lessons learned with actual applications.

Handbook of Research on Developments in E-health and Telemedicine

Presents the concepts and terminology of cognitive patterns and modeling and explains the uniqueness of cognitive patterns as an approach in modeling business systems and processes.

Value by Design

Cognitive Hyperconnected Digital Transformation provides an overview of the current Internet of Things (IoT) landscape, ranging from research, innovation and development priorities to enabling technologies in a global context. It is intended as a standalone book in a series that covers the Internet of Things activities of the IERC-Internet of Things European Research Cluster, including both research and technological innovation, validation and deployment. The book builds on the ideas put forward by the European Research Cluster, the IoT European Platform Initiative (IoT-EPI) and the IoT European Large-Scale Pilots Programme, presenting global views and state-of-the-art results regarding the challenges facing IoT research, innovation, development and deployment in the next years. Hyperconnected environments integrating industrial/business/consumer IoT technologies and applications require new IoT open systems architectures integrated with network

architecture (a knowledge-centric network for IoT), IoT system design and open, horizontal and interoperable platforms managing things that are digital, automated and connected and that function in real-time with remote access and control based on Internet-enabled tools. The IoT is bridging the physical world with the virtual world by combining augmented reality (AR), virtual reality (VR), machine learning and artificial intelligence (AI) to support the physical-digital integrations in the Internet of mobile things based on sensors/actuators, communication, analytics technologies, cyber-physical systems, software, cognitive systems and IoT platforms with multiple functionalities. These IoT systems have the potential to understand, learn, predict, adapt and operate autonomously. They can change future behaviour, while the combination of extensive parallel processing power, advanced algorithms and data sets feed the cognitive algorithms that allow the IoT systems to develop new services and propose new solutions. IoT technologies are moving into the industrial space and enhancing traditional industrial platforms with solutions that break free of device-, operating system- and protocol-dependency. Secure edge computing solutions replace local networks, web services replace software, and devices with networked programmable logic controllers (NPLCs) based on Internet protocols replace devices that use proprietary protocols. Information captured by edge devices on the factory floor is secure and accessible from any location in real time, opening the communication gateway both vertically (connecting machines across the factory and enabling the instant availability of data to stakeholders within operational silos) and horizontally (with one framework

for the entire supply chain, across departments, business units, global factory locations and other markets). End-to-end security and privacy solutions in IoT space require agile, context-aware and scalable components with mechanisms that are both fluid and adaptive. The convergence of IT (information technology) and OT (operational technology) makes security and privacy by default a new important element where security is addressed at the architecture level, across applications and domains, using multi-layered distributed security measures. Blockchain is transforming industry operating models by adding trust to untrusted environments, providing distributed security mechanisms and transparent access to the information in the chain. Digital technology platforms are evolving, with IoT platforms integrating complex info

Intelligent Paradigms for Healthcare Enterprises

Enterprise Analytics

This book discusses the process of "Lot Streaming" and how it can significantly improve the overall performance of a production process, and thereby, make the operation of a manufacturing system lean. It provides a complete introduction to the Flow Shop Lot Streaming Problem and provides a historical perspective. It

further presents algorithms for a variety of lot streaming problems with numerical illustrations for ease of understanding and implementation.

Intelligent Enterprise

This new hands-on book teaches professionals how to build visual models that illustrate the current workflow process and shows where improvement and development can take place. The book provides proven techniques for identifying, modeling, and redesigning business process and explains how to implement workflow improvement.

Intelligent Decision Support Systems—A Journey to Smarter Healthcare

"This book provide a comprehensive coverage of the latest and most relevant knowledge, developments, solutions, and practical applications, related to e-Health, this new field of knowledge able to transform the way we live and deliver services, both from the technological and social perspectives"--Provided by publisher.

Health Care Technology: Innovating clinical care through

technology

"a provocative new book" -- The New York Times AI-centric organizations exhibit a new operating architecture, redefining how they create, capture, share, and deliver value. Marco Iansiti and Karim R. Lakhani show how reinventing the firm around data, analytics, and AI removes traditional constraints on scale, scope, and learning that have restricted business growth for hundreds of years. From Airbnb to Ant Financial, Microsoft to Amazon, research shows how AI-driven processes are vastly more scalable than traditional processes, allow massive scope increase, enabling companies to straddle industry boundaries, and create powerful opportunities for learning--to drive ever more accurate, complex, and sophisticated predictions. When traditional operating constraints are removed, strategy becomes a whole new game, one whose rules and likely outcomes this book will make clear. Iansiti and Lakhani: Present a framework for rethinking business and operating models Explain how "collisions" between AI-driven/digital and traditional/analog firms are reshaping competition, altering the structure of our economy, and forcing traditional companies to rearchitect their operating models Explain the opportunities and risks created by digital firms Describe the new challenges and responsibilities for the leaders of both digital and traditional firms Packed with examples--including many from the most powerful and innovative global, AI-driven competitors--and based on research in hundreds of firms across many sectors, this is your essential guide for rethinking how your firm competes and operates in the

era of AI.

Successful Case-based Reasoning Applications-2

This book contains the proceedings of the KES International conferences on Innovation in Medicine and Healthcare (KES-InMed-19) and Intelligent Interactive Multimedia Systems and Services (KES-IIMSS-19), held on 17–19 June 2019 and co-located in St. Julians, on the island of Malta, as part of the KES Smart Digital Futures 2019 multi-theme conference. The major areas covered by KES-InMed-19 include: Digital IT Architecture in Healthcare; Advanced ICT for Medical and Healthcare; Biomedical Engineering, Trends, Research and Technologies and Healthcare Support System. The major areas covered by KES-IIMSS-19 were: Interactive Technologies; Artificial Intelligence and Data Analytics; Intelligent Services and Architectures and Applications. This book is of use to researchers in these vibrant areas, managers, industrialists and anyone wishing to gain an overview of the latest research in these fields.

Advanced Computational Intelligence Paradigms in Healthcare 6

The key for lasting competitive advantage lies in embracing innovation as a core

value and managing it effectively. Innovation Management provides a comprehensive overview of innovation theory and a framework for implementation, intended for business school students of Innovation Management, managers, and practitioners alike. In this new text, authors Jin Chen and Gang Zheng examine innovation from the perspectives of strategy, internal processes, resource management, and organizational culture. Numerous case studies, illustrating both successes and failures in innovation, include Tesla, P&G, Apple, Uber, Google, NVIDIA, Haier Group, Motorola, and Nokia. Staring from a systematic introduction to the types, process and models of innovation, the authors present a strategical management framework that includes models for indigenous innovation, total innovation, open innovation and holistic innovation. They outline the key roles played by management of capital, information and knowledge systems, human resources, and IP rights. Organizational systems that are designed to stimulate innovation within the corporation are detailed, and finally the authors examine the future of innovation management, focusing the need for sustainable innovation that recognized the importance of environmental and ecological concerns.

Flow Shop Lot Streaming

MIE 2002 is the XVIIth international conference of the European Federation of Medical Informatics. Today, mankind builds up the information society, enabled by

the underlying rapid development in computer technology. The significance of the spread of the internet is comparable to the significance of Gutenberg's invention. On one hand it both helps dissemination of data and knowledge and sharing of ideas. On the other hand the achievements may divide the society, as did non-literacy deprive many people from knowledge throughout centuries. Today millions of people are isolated from an incredibly large amount of information because of "computer non-literacy," and a new elite mastering the information society has appeared. However, the ease of production and dissemination of information may foster thoughtless communication, and has lead to a flood of information and disinformation. We have to learn how to behave in this new situation, in which the dissemination of information - at an international level - is totally uncontrolled. In the area of medical or health informatics these questions are more serious. Lack of information, false or inadequate information, as well as improper interpretation of accurate information may seriously harm patients. And the process may go out of control of the physician, i.e. patients can "treat" themselves just by visiting some health sites on the net. Everybody may throw a message in a bottle in information flood, and everybody may pick up messages at any time. Can we do anything to ensure that all messages are valid? Can we guarantee that our messages reach the intended audience? Can we secure that content has not changed on its way? Do we know that people getting our messages will interpret them correctly? Are we able to understand the intention of a sender, when we get a message totally out of context? These questions build up the framework of MIE2002.

The Digital Twin Paradigm for Smarter Systems and Environments: the Industry Use Cases

Advanced Computational Intelligence Paradigms in Healthcare 5

This book describes the current state of the art in intelligent support system design in the healthcare field, including recent advances in Clinical and Rehabilitation Decision Support Systems, and Technology Acceptance in Medical Decision Support Systems.

Exploring Enterprise Service Bus in the Service-Oriented Architecture Paradigm

Cross-Disciplinary Advances in Human Computer Interaction: User Modeling, Social Computing, and Adaptive Interfaces

Over 10,000 Detailed Entries! "There is a myth that all stakeholders in the

healthcare space understand the meaning of basic information technology jargon. In truth, the vernacular of contemporary medical information systems is unique, and often misused or misunderstoodÖ Moreover, an emerging national Heath Information Technology (HIT) architecture; in the guise of terms, definitions, acronyms, abbreviations and standards; often puts the non-expert medical, nursing, public policy administrator or paraprofessional in a position of maximum uncertainty and minimum productivity ÖThe Dictionary of Health Information Technology and Security will therefore help define, clarify and explainYou will refer to it daily." -- Richard J. Mata, MD, MS, MS-CIS, Certified Medical Planner© (Hon), Chief Medical Information Officer [CMIO], Ricktelmed Information Systems, Assistant Professor Texas State University, San Marcos, Texas An Essential Tool for Every Health Care Industry Sector: layman, purchaser, and benefits manager physician, provider and healthcare facility payer, intermediary and consulting professional Key Benefits & Features Include: New HIT, HIPAA, WHCQA, HITPA, and NEPSI terminology Abbreviations, acronyms, and slang-terms defined Illustrations and simple examples Cross-references to current research

Deutsche Nationalbibliografie

The impact of information technology on the management of healthcare has been enormous in recent years, and it continues to grow in scope and complexity. This book presents papers from the 2014 International Conference on Informatics,

Management, and Technology in Healthcare (ICIMTH), held in Athens, Greece, in July 2014. The book includes 79 full papers and 12 poster presentations as well as keynotes, two workshops and three tutorials. Papers are divided into sections including: clinical informatics; decision support and intelligent systems; e-learning and education; health informatics, information management and technology assessment; healthcare IT; mobile technology in healthcare; public health informatics and issues; social and legal issues; and telemedicine. The book will be of interest to all those whose work involves the use of biomedical and health informatics.

Intelligent Enterprise

Argues that business success in the 1990s will be determined by an understanding of "core competencies" based on knowledge and services

Advanced Computational Intelligence Paradigms in Healthcare - 1

In this penetrating study of how knowledge-based services and technology are revolutionizing the economy and every corporate strategy, James Brian Quinn argues that the successful companies of the 90's -- whether in manufacturing or

services -- will derive their competitive edge not from ephemerally superior products but from a deep understanding of a few highly developed knowledge and service based "core competencies." Rarely will owning the largest raw materials resource, manufacturing plants, equipment bases, or integrated facilities provide a maintainable competitive edge for major companies. Such physical properties are too easily cloned or bypassed. From now on, Quinn documents, intelligent enterprises will derive sustainable advantage from knowledge and service based activities that leverage intellectual assets. They will increase value through technological sophistication, better knowledge bases, more creative customer responsiveness, and the unsurpassed management of human and intellectual capital that competitors cannot reproduce. Quinn analyzes the technological and economic forces that make such strategies essential. He shows in detail how to create and leverage knowledge and service based core competencies for maximum focus and effectiveness. Managers, Quinn asserts, must define each value-creating activity as a knowledge based service and determine whether or not they can perform that service -- be it research, design, inventory control, accounting, distribution, or advertising -- better than anyone else in the world. Using examples from companies such as Merck, Honda, Apple, Boeing, and Wal-Mart, Quinn describes how forward-looking companies can best perform needed analyses and implement strategies around selected core competencies. By eliminating or "outsourcing" less important functions to superior outside vendors, firms become more responsive, decentralized, and lean. They become the

"intelligent enterprises" of the 1990s, leveraging human and capital resources much more than other firms. They may also take on radically new organizational forms, become "starburst," "inverted," "infinitely flat," or "spiders' web" configurations. By designing and benchmarking their knowledge and service based activities to be "best in world," managers can obliterate overhead costs, smash bureaucracies, motivate personnel, and create greater value for customers and shareholders alike.

Applications and Innovations in Intelligent Systems XIII

The papers in this volume are the refereed application papers presented at AI-2005, the Twenty-fifth SGAI International Conference on Innovative Techniques and Applications of Artificial Intelligence, held in Cambridge in December 2005. The papers present new and innovative developments in the field, divided into sections on Synthesis and Prediction, Scheduling and Search, Diagnosis and Monitoring, Classification and Design, and Analysis and Evaluation. This is the thirteenth volume in the Applications and Innovations series. The series serves as a key reference on the use of AI Technology to enable organisations to solve complex problems and gain significant business benefits. The Technical Stream papers are published as a companion volume under the title Research and Development in Intelligent Systems XXII.

Integrating Information Technology and Management for Quality of Care

Recent Advances in Knowledge-based Paradigms and Applications

"This book includes state-of-the-art methodologies that introduce biomedical imaging in decision support systems and their applications in clinical practice"--Provided by publisher.

American Book Publishing Record

“ ... the enterprise of today has changed ... wherever you sit in this new corporation ... Srinivasan gives us a practical and provocative guide for rethinking our business process ... calling us all to action around rapid development of our old, hierarchical structures into flexible customer centric competitive force .... A must read for today’s business leader.” Mark Nunnelly, Executive Director, MassIT, Commonwealth of Massachusetts and Managing Director, Bain Capital “’Efficiency,’ ‘agile,’ and ‘analytics’ used to be the rage. Venkat Srinivasan explains in this provocative book why organizations can no longer afford to stop there. They need

to move beyond – to be 'intelligent.' It isn't just theory. He's done it." Bharat Anand, Henry R. Byers Professor of Business Administration, Harvard Business School In the era of big data and automation, the book presents a cutting-edge approach to how enterprises should organize and function. Striking a practical balance between theory and practice, The Intelligent Enterprise in the Era of Big Data presents the enterprise architecture that identifies the power of the emerging technology environment. Beginning with an introduction to the key challenges that enterprises face, the book systematically outlines modern enterprise architecture through a detailed discussion of the inseparable elements of such architecture: efficiency, flexibility, and intelligence. This architecture enables rapid responses to market needs by sensing important developments in internal and external environments in real time. Illustrating all of these elements in an integrated fashion, The Intelligent Enterprise in the Era of Big Data also features: • A detailed discussion on issues of time-to-market and flexibility with respect to enterprise application technology • Novel analyses illustrated through extensive real-world case studies to help readers better understand the applicability of the architecture and concepts • Various applications of natural language processing to real-world business transactions • Practical approaches for designing and building intelligent enterprises The Intelligent Enterprise in the Era of Big Data is an appropriate reference for business executives, information technology professionals, data scientists, and management consultants. The book is also an excellent supplementary textbook for upper-undergraduate and graduate-level courses in

business intelligence, data mining, big data, and business process automation. “a compelling vision of the next generation of organization—the intelligent enterprise—which will leverage not just big data but also unstructured text and artificial intelligence to optimize internal processes in real time … a must-read book for CEOs and CTOs in all industries.” Ravi Ramamurti, D”Amore-McKim Distinguished Professor of International Business and Strategy, and Director, Center for Emerging Markets, Northeastern University “It is about the brave new world that narrows the gap between technology and business …. The book has practical advice from a thoughtful practitioner. Intelligent automation will be a competitive strength in the future. Will your company be ready?” Victor J. Menezes, Retired Senior Vice Chairman, Citigroup Venkat Srinivasan, PhD, is Chairman and Chief Executive Officer of RAGE Frameworks, Inc., which supports the creation of intelligent business process automation solutions and cognitive intelligence solutions for global corporations. He is an entrepreneur and holds several patents in the area of knowledge-based technology architectures. He is the author of two edited volumes and over 30 peer-reviewed publications. He has served as an associate professor in the College of Business Administration at Northeastern University.

Workflow Modeling

The Intelligent Enterprise in the Era of Big Data

Covers real-time application areas including control, signal processing and plant management examples. Explains the analysis procedure in detail. Numerous diagrams represent the graphic modeling tools required. Contains extensive exercises and actual applications examples.

Innovation Management

"Telescopic Hydraulic Gantry Systems" is the first comprehensive handbook that addresses the use of hydraulic gantry systems for lifting in construction and industrial environments. Written by one of the leading authorities on gantries, this book begins with a detailed history of the development of hydraulic gantry systems starting in 1963 and provides a discussion of the basic features and capabilities of gantries. Additional topics covered include hydraulic system components and functions, the types and nature of the loads that act during a lift, stability analysis, lift planning considerations, engineering of header beams and track systems, and industry standards, safety and risk management.

Dictionary of Health Information Technology and Security

Vol. 2: Computational intelligence paradigms offer many advantages in maintaining and enhancing the field of healthcare. This volume presents seven chapters selected from the rapidly growing application areas of computational intelligence to healthcare systems, including intelligent synthetic characters, man-machine interface, menu generators, analysis of user acceptance, pictures archiving and communication systems. This book will serve as a useful resource for the health professionals, professors, students, and the computer scientists, who are working on or interested in learning healthcare systems, to overview the current state of the art of diverse applications of computational intelligence to healthcare practice