
Maintenance Engineering Vijayaraghavan

Proceedings of International Conference on Intelligent Manufacturing and Automation
eMaintenance
Static Analysis
Handbook of Industry 4.0 and SMART Systems
Intelligent Systems in Big Data, Semantic Web and Machine Learning
Proceedings of the 7th International Conference on Sustainable Design and Manufacturing (KES-SDM 2020)
Greenhouse Gases
Software Engineering for Modern Web Applications: Methodologies and Technologies
Engineering Metrology and Measurements
Computer Aided Design and Manufacturing
Intelligent Systems in Big Data, Semantic Web and Machine Learning
Practical Centrifugal Pumps
A Textbook of Strength of Materials
Methodologies and Technologies
(in S.I. Units)
Handbook of Maintenance Management and Engineering
MAINTENANCE ENGINEERING AND MANAGEMENT
Select Proceedings of ICETME 2018
Lubrication Engineering
Commerce America
Maintenance Engineering Handbook
Singapore Blue Chips, The: The Rewards & Risks Of Investing In Singapore's Largest Corporates
Practical Grounding, Bonding, Shielding and Surge Protection
Boiling and Condensation
Essential Electronic Tools for Efficiency
Green Engineering and Technology
Practical Electrical Equipment and Installations in Hazardous Areas
Practical Power Distribution for Industry
19th International Symposium, SAS 2012, Deauville, France, September 11-13, 2012. Proceedings
Automobile Mechanical and Electrical Systems
ICIMA 2020
Innovations, Design, and Architectural Implementation
Fundamentals of Project Management
Commonwealth Universities Yearbook
Advances in Through-life Engineering Services
Manufacturing Process
Electronics & Telecommunication Engineering Division
Engineering Economy

MILES GAGE

Proceedings of International Conference on Intelligent Manufacturing and Automation

Routledge

This book gathers selected papers presented at the Second International Conference on Intelligent Manufacturing and Automation (ICIMA 2020), which was jointly organized by the Departments of Mechanical Engineering and Production Engineering at Dwarkadas J. Sanghvi College of Engineering (DJSCE), Mumbai, and by the Indian Society of Manufacturing Engineers (ISME). Covering a range of topics in intelligent manufacturing, automation, advanced materials and design, it focuses on the latest advances in e.g. CAD/CAM/CAE/CIM/FMS in manufacturing, artificial intelligence in manufacturing, IoT in manufacturing, product design & development, DFM/DFA/FMEA, MEMS & nanotechnology, rapid prototyping, computational techniques, nano- & micro-machining, sustainable manufacturing, industrial engineering, manufacturing process management, modelling & optimization techniques, CRM, MRP & ERP, green, lean & agile manufacturing, logistics & supply chain management, quality assurance & environmental protection, advanced material processing & characterization of composite & smart materials. The book is intended as a reference guide for future researchers, and as a valuable resource for students in graduate and doctoral programmes.

eMaintenance

Firewall Media

Whatever your hydraulic applications, Practical Hydraulic Systems: Operation & Troubleshooting For Engineers & Technicians will help you to increase your knowledge of the fundamentals, improve your maintenance programs and become an excellent troubleshooter of problems in this area. Cutaways of all major components are included in the book to visually demonstrate the components' construction and operation. Developing an understanding of how it works leads to an understanding of how and why it fails. Multimedia views of the equipment are shown, to give as realistic a view of hydraulic systems as possible. The book is highly practical, comprehensive

and interactive. It discusses Hydraulic Systems construction, design applications, operations, maintenance, and management issues and provides you with the most up-to-date information and Best Practice in dealing with the subject. * A focus on maintenance and troubleshooting makes this book essential reading for practising engineers. * Written to cover the requirements of mechanical / industrial and civil engineering. * Cutaway diagrams demonstrate the construction and operation of key equipment.

Static Analysis

Elsevier

This book constitutes the thoroughly refereed proceedings of the 19th International Symposium on Static Analysis, SAS 2012, held in Deauville, France, in September 2012. The 25 revised full papers presented together with 4 invited talks were selected from 62 submissions. The papers address all aspects of static analysis, including abstract domains, abstract interpretation, abstract testing, bug detection, data flow analysis, model checking, new applications, program transformation, program verification, security analysis, theoretical frameworks, and type checking.

Handbook of Industry 4.0 and SMART Systems

John Wiley & Sons

This student-friendly text on the current economic issues particular to engineering covers the topics needed to analyze engineering alternatives. Students use both hand-worked and spreadsheet solutions of examples, problems and case studies. In this edition the options have been increased with an expanded spreadsheet analysis component, twice the number of case studies, and virtually all new end-of-chapter problems. The chapters on factor derivation and usage, cost estimation, replacement studies, and after-tax evaluation have been heavily revised. New material is included on public sector projects and cost estimation. A reordering of chapters puts the fundamental topics up front in the text. Many chapters include a special set of problems that prepare the students for the Fundamentals of Engineering (FE) exam. This text provides students and practicing professionals with a solid preparation in the financial understanding of engineering problems and projects, as well as the techniques needed for evaluating and making sound economic decisions. Distinguishing characteristics include

learning objectives for each chapter, an easy-to-read writing style, many solved examples, integrated spreadsheets, and case studies throughout the text. Graphical cross-referencing between topics and quick-solve spreadsheet solutions are indicated in the margin throughout the text. While the chapters are progressive, over three-quarters can stand alone, allowing instructors flexibility for meeting course needs. A complete online learning center (OLC) offers supplemental practice problems, spreadsheet exercises, and review questions for the the Fundamentals of Engineering (FE) exam.

Intelligent Systems in Big Data, Semantic Web and Machine Learning

Springer Nature

eMaintenance: Essential Electronic Tools for Efficiency enables the reader to improve efficiency of operations, maintenance staff, infrastructure managers and system integrators, by accessing a real time computerized system from data to decision. In recent years, the exciting possibilities of eMaintenance have become increasingly recognized as a source of productivity improvement in industry. The seamless linking of systems and equipment to control centres for real time reconfiguring is improving efficiency, reliability, and sustainability in a variety of settings. The book provides an introduction to collecting and processing data from machinery, explains the methods of overcoming the challenges of data collection and processing, and presents tools for data driven condition monitoring and decision making. This is a groundbreaking handbook for those interested in the possibilities of running a plant as a smart asset. Provides an introduction to collecting and processing data from machinery Explains how to use sensor-based tools to increase efficiency of diagnosis, prognosis, and decision-making in maintenance Describes methods for overcoming the challenges of data collection and processing

Proceedings of the 7th International Conference on Sustainable Design and Manufacturing (KES-SDM 2020)

Elsevier

Escalating urbanization and energy consumption have increased the demand for green engineering solutions and intelligent systems to mitigate environmental hazards and offer a more sustainable future. Green engineering technologies help to create sustainable, eco-friendly designs and solutions with the aid of

updated tools, methods, designs, and innovations. These technologies play a significant role in optimizing sustainability in various areas of energy, agriculture, waste management, and bioremediation and include green computing and artificial intelligence (AI) applications. *Green Engineering and Technology: Innovations, Design, and Architectural Implementation* examines the most recent advancements in green technology, across multiple industries, and outlines the opportunities of emerging and future innovations, as well as practical real-world implementation. Features: Provides different models capable of fulfilling the criteria of energy efficiency, health and safety, renewable resources, and more Examines recycling, waste management, and bioremediation techniques as well as waste-to-energy technologies Presents business cases for adopting green technologies including electronics, manufacturing, and infrastructure projects Reviews green technologies for applications such as energy production, building construction, transportation, and industrialization *Green Engineering and Technology: Innovations, Design, and Architectural Implementation* serves as a useful and practical guide for practicing engineers, researchers, and students alike.

Greenhouse Gases Springer

To be able to compete successfully both at national and international levels, production systems and equipment must perform at levels not even thinkable a decade ago. Requirements for increased product quality, reduced throughput time and enhanced operating effectiveness within a rapidly changing customer demand environment continue to demand a high maintenance performance. In some cases, maintenance is required to increase operational effectiveness and revenues and customer satisfaction while reducing capital, operating and support costs. This may be the largest challenge facing production enterprises these days. For this, maintenance strategy is required to be aligned with the production logistics and also to keep updated with the current best practices. Maintenance has become a multidisciplinary activity and one may come across situations in which maintenance is the responsibility of people whose training is not engineering. This handbook aims to assist at different levels of understanding whether the manager is an engineer, a production manager, an experienced maintenance practitioner or a beginner. Topics selected to be included in this

handbook cover a wide range of issues in the area of maintenance management and engineering to cater for all those interested in maintenance whether practitioners or researchers. This handbook is divided into 6 parts and contains 26 chapters covering a wide range of topics related to maintenance management and engineering.

Software Engineering for Modern Web Applications: Methodologies and Technologies World Scientific

A pioneering and comprehensive work, *The Singapore Blue Chips* puts the spotlight on 22 of Singapore's largest corporates. This is the first book that provides a quick snapshot of Singapore's large cap (large market capitalisation) corporates as investment propositions, and is a timely tribute to the nation's 50 years of independence and development. Written for finance professionals and students as well as readers with a general interest in business, investing and finance, each chapter of this book is dedicated to one company and delves into its attractiveness as an investment proposition, the associated investments risk and the company's prospects as of end-2016.

Engineering Metrology and Measurements IGI Global

The book provides technical know-how not covered by most universities and colleges in a subject that is central to the roles of many electrical engineers in industry, focusing on switchgear, power cables, power factor correction, and network studies. * Learn how to install and maintain electrical power equipment in industrial settings * Select and specify the right power system at the right price * Provides the practical essentials for reliable operation of industrial electrical networks - covering switchgear, cabling and power correction factors

Computer Aided Design and Manufacturing Amacom Books

The second edition of *Automobile Mechanical and Electrical Systems* concentrates on core technologies to provide the essential information required to understand how different vehicle systems work. It gives a complete overview of the components and workings of a vehicle from the engine through to the chassis and electronics. It also explains the necessary tools and equipment needed in effective car maintenance and repair, and relevant safety procedures are included throughout. Designed to make learning easier, this book contains: Photographs, flow charts and quick reference tables Detailed diagrams and clear descriptions that simplify the more complicated topics and aid

revision Useful features throughout, including definitions, key facts and 'safety first' considerations. In full colour and with support materials from the author's website (www.automotive-technology.org), this is the guide no student enrolled on an automotive maintenance and repair course should be without.

Intelligent Systems in Big Data, Semantic Web and Machine Learning Springer Nature

"This book presents current, effective software engineering methods for the design and development of modern Web-based applications"--Provided by publisher.

Practical Centrifugal Pumps Elsevier

This book consists of peer-reviewed papers, presented at the International Conference on Sustainable Design and Manufacturing (SDM 2020). Leading-edge research into sustainable design and manufacturing aims to enable the manufacturing industry to grow by adopting more advanced technologies and at the same time improve its sustainability by reducing its environmental impact. Relevant themes and topics include sustainable design, innovation and services; sustainable manufacturing processes and technology; sustainable manufacturing systems and enterprises; and decision support for sustainability. Application areas are wide and varied. The book provides an excellent overview of the latest developments in the sustainable design and manufacturing areas.

A Textbook of Strength of Materials Elsevier

Machinery Vibration Analysis and Predictive Maintenance provides a detailed examination of the detection, location and diagnosis of faults in rotating and reciprocating machinery using vibration analysis. The basics and underlying physics of vibration signals are first examined. The acquisition and processing of signals is then reviewed followed by a discussion of machinery fault diagnosis using vibration analysis. Hereafter the important issue of rectifying faults that have been identified using vibration analysis is covered. The book also covers the other techniques of predictive maintenance such as oil and particle analysis, ultrasound and infrared thermography. The latest approaches and equipment used together with the latest techniques in vibration analysis emerging from current research are also highlighted. Understand the basics of vibration measurement Apply vibration analysis for different machinery faults Diagnose machinery-

related problems with vibration analysis techniques
Methodologies and Technologies Academic Press
 Sustainability should be a key component of every process, safeguarding resources and reserves for future generations. This book shows how a responsible use of resources is possible, offering valid technological alternatives to fight climate change. We offer current technologies and valid methods for a wide range of activities: teaching, investigation, work, business and even daily life. We encourage all our readers to join us and become part of the solution to climate change, rather than the problem. After reading this book, we are certain that you will find justified reasons to start your own personal and social awareness campaign in favour of these effective technologies against climate change.

(in S.I. Units) Springer Nature

The impact of the technology of Computer-Aided Design and Manufacturing in automobile engineering, marine engineering and aerospace engineering has been tremendous. Using computers in manufacturing is receiving particular prominence as industries seek to improve product quality, increase productivity and to reduce inventory costs. Therefore, the emphasis has been attributed to the subject of CAD and its integration with CAM. Designed as a textbook for the undergraduate students of mechanical engineering, production engineering and industrial engineering, it provides a description of both the hardware and software of CAD/CAM systems. The Coverage Includes □ Principles of interactive computer graphics □ Wireframe, surface and solid modelling □ Finite element modelling and analysis □ NC part programming and computer-aided part programming □ Machine vision systems □ Robot technology and automated guided vehicles □ Flexible manufacturing systems □ Computer integrated manufacturing □ Artificial intelligence and expert systems □ Communication systems in manufacturing PEDAGOGICAL FEATURES □ CNC program examples and APT program examples □ Review questions at the end of every chapter □ A comprehensive Glossary □ A Question Bank at the end of the chapters

Handbook of Maintenance Management and Engineering
 Springer Science & Business Media

This book comprises select proceedings of the International Conference on Emerging Trends in Mechanical Engineering

(ICETME 2018). The book covers various topics of mechanical engineering like computational fluid dynamics, heat transfer, machine dynamics, tribology, and composite materials. In addition, relevant studies in the allied fields of manufacturing, industrial and production engineering are also covered. The applications of latest tools and techniques in the context of mechanical engineering problems are discussed in this book. The contents of this book will be useful for students, researchers as well as industry professionals.

MAINTENANCE ENGINEERING AND MANAGEMENT Oxford University Press

This book describes important methodologies, tools and techniques from the fields of artificial intelligence, basically those which are based on relevant conceptual and formal development. The coverage is wide, ranging from machine learning to the use of data on the Semantic Web, with many new topics. The contributions are concerned with machine learning, big data, data processing in medicine, similarity processing in ontologies, semantic image analysis, as well as many applications including the use of machine learning techniques for cloud security, artificial intelligence techniques for detecting COVID-19, the Internet of things, etc. The book is meant to be a very important and useful source of information for researchers and doctoral students in data analysis, Semantic Web, big data, machine learning, computer engineering and related disciplines, as well as for postgraduate students who want to integrate the doctoral cycle.

Select Proceedings of ICETME 2018 CRC Press

Knowledge-Driven Work is a pioneering study of the cross-cultural diffusion of ideas about the organization of work. These ideas, linked with the knowledge of the workforce, are rapidly becoming the primary source of competitive advantage in the world economy. The book provides an in-depth look at eight Japanese-affiliated manufacturing facilities operating in the United States, combined with examinations of their sister facilities in Japan. The authors offer their insights into the complex process by which elements of work systems in one country interact with those in another. They trace the flow of ideas from Japan to the US and other nations, and the beginnings of a reverse diffusion of innovation back to Japan. The authors organize their findings into six categories: the cross-cultural diffusion of work practices, team-based work systems, kaizen and employee involvement,

employment security, human resource management, and labor-management relations. Their study of team-based work systems yields a taxonomy of teams and reveals some conflicts between the desire for self-management and the existence of interdependencies. Investigations into kaizen (ongoing incremental improvement) indicate that its emphasis on employee-driven, systematic problem solving makes it a strong counterpoint to the idea of top-down "re-engineering." Looking at employment security, the authors note that while most US managers believe that it restrains managerial flexibility, managers at the firms they observed see it as essential to the flexibility associated with teamwork and kaizen. The study of human resource management practices suggests competitive advantages in diverse, older, unionized, and urban work forces, and emphasizes the importance of wide-ranging training programs in a work system premised on a long-term perspective. The "wildcard" in the work places observed is labor-management relations, the area in which Japanese managers have been least likely to import their ideas. The authors report on several situations in which existing labor-management structures remained untouched, with mixed results: greater labor-management consultation, for example, but also increased ambiguity of roles. The thread running through all of these areas of work is "virtual knowledge," an ephemeral form of knowledge derived from a particular combination of people focused on a given issue. The authors point out that this powerful form of knowledge is only effectively harnessed in environments that are free of fear, that have established procedures for collective problem-solving, and that have some stability in group composition. They claim that too often companies allow virtual knowledge to dissipate, squandering opportunities to create more competitive workplaces. For those organizations that have succeeded in anticipating and channeling it, however, virtual knowledge leads to a knowledge-driven workplace and continuous improvement.

Lubrication Engineering Laxmi Publications

This book describes important methodologies, tools and techniques from the fields of artificial intelligence, basically those which are based on relevant conceptual and formal development. The coverage is wide, ranging from machine learning to the use of data on the Semantic Web, with many new topics. The

contributions are concerned with machine learning, big data, data processing in medicine, similarity processing in ontologies, semantic image analysis, as well as many applications including the use of machine learning techniques for cloud security, artificial intelligence techniques for detecting COVID-19, the Internet of

things, etc. The book is meant to be a very important and useful source of information for researchers and doctoral students in data analysis, Semantic Web, big data, machine learning, computer engineering and related disciplines, as well as for postgraduate students who want to integrate the doctoral cycle.

Commerce America BoD - Books on Demand Effective from 2008-09 session, U.P.T.U. has introduced the subject of manufacturing processes for first year engineering students of all streams. This textbook covers the entire course material in a distilled form.