

Analysis Of Oreda Data For Maintenance Optimisation

Data Driven Energy Centered Maintenance Data Mining for Design and Manufacturing IoT Streams for Data-Driven Predictive Maintenance and IoT, Edge, and Mobile for Embedded Machine Learning Operations Management Data Structured Software Maintenance Energy Centered Maintenance Supply Chain Integration Challenges in Commercial Aerospace Predictive Maintenance in Smart Factories IoT Streams for Data-Driven Predictive Maintenance and IoT, Edge, and Mobile for Embedded Machine Learning Introduction to Maintenance Engineering Software Maintenance Management Field Demonstrations of Advanced Data Acquisition Technology for Maintenance Management Data Structured Software Maintenance Maintenance Data Supply Chain Management in the Big Data Era Using the Air Force Maintenance Data Collection System Data to Identify Candidates for Improvement in Reliability and Maintainability An Introduction to Predictive Maintenance Analysis of AFM66-1 Organization and Field Maintenance Data Collection Facilities Maintenance & Repair Costs with Rsmeans Data: 60302 Maintenance Decision Making Efficient Maintenance and Recovery of Data Warehouses Maintenance, Replacement, and Reliability Software Maintenance Analysis and Design of Operational Data Management Systems for Maintenance of Parks and Urban Open Space Data Requirements and Maintenance of Records for Spent Fuel Management Development of a Data System for a Health Maintenance Organization The Rural Income Maintenance Experiment: Data quality and administrative issues Survey Data Book and Standards for Operation and Maintenance of Physical Plant in Colleges and Universities Maintenance and Dissemination of a Water Transfer Data Base for 12 Western States, 1987-2008 Data Driven Energy Centered Maintenance Uniform Documentation Standards for the Development, Maintenance, and Operation of Automated Data Systems The Naval Aviation Maintenance Program (NAMP).: Maintenance data systems Data-Driven Cognitive Manufacturing - Applications in Predictive Maintenance and Zero Defect Manufacturing E-maintenance Track Data-Oriented Maintenance Intervention Limit Determination for Ballasted Light Rail Tracks through Multibody Simulations Handbook of Data Recording, Maintenance, and Management for the Biomedical Sciences A Study of the Air Force Maintenance Technical Data System Data Analysis of AFM66-1 Organization and Field Maintenance Data Collection Guidebook on LANDFIRE Fuels Data Acquisition, Critique, Modification, Maintenance, and Model Calibration Updating Farm, Tract, and Crop Data Through the Maintenance Application

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Data Structured Software Maintenance Oct 23 2021 Data Structured Software Maintenance proposes a long-term solution to the problem of program maintenance, the largest single expense of data processing departments today. Traditional maintenance procedures cause programs to become unmaintainable over time because of the cumulative effect of changes to the system. In this book, David A. Higgins argues against the practice of patching a program and redesigning just the part that needs repair or enhancement. Instead, readers are encouraged to use a structured method like the Warnier / Orr approach to redesign and document the existing programs so that they are easier to maintain over the long term. The Warnier/Orr data structured methodology addresses more than just the coding style or the control structures of a program, and it can be applied even to programs that weren't developed with the method. The ultimate goal of Data Structured Software Maintenance is to have a good design for each program and to have the program closely match the design. Other topics include a definition of good, maintainable programs, logical and physical design, repair and modification of traditional programs, maintenance of large programs, and installation of the Warnier/Orr method into an organization. Numerous examples and more than one hundred figures illustrate the text.

The Rural Income Maintenance Experiment: Data quality and administrative issues Aug 09 2020

E-maintenance Jan 02 2020 E-maintenance is the synthesis of two major trends in today's society: the growing importance of maintenance as a key technology and the rapid development of information and communication technology. E-maintenance gives the reader an overview of the possibilities offered by new and advanced information and communication technology to achieve efficient maintenance solutions in industry, energy production and transportation, thereby supporting sustainable development in society. Sixteen chapters cover a range of different technologies, such as: new micro sensors, on-line lubrication sensors, smart tags for condition monitoring, wireless communication and smart personal digital assistants. E-maintenance also discusses semantic data-structuring solutions; ontology structured communications; implementation of diagnostics and prognostics; and maintenance decision support by economic optimisation. It includes four industrial cases that are both described and analysed in detail, with an outline of a global application solution. E-maintenance is a useful tool for engineers and technicians who wish to develop e-maintenance in industrial sites. It is also a source of new and stimulating ideas for researchers looking to make the next step towards sustainable development.

Data-Driven Cognitive Manufacturing - Applications in Predictive Maintenance and Zero Defect Manufacturing Feb 01 2020

Uniform Documentation Standards for the Development, Maintenance, and Operation of Automated Data Systems Apr 04 2020

Maintenance Decision Making Mar 16 2021 Over the last decades maintenance management has evolved from a somewhat neglected function into a full-fledged business function in the industry as well as in the service sector. This book provides a structured approach to

maintenance management. It covers maintenance strategy decisions, resource management, assessment system design, etc. Decision support models and tools in these areas are discussed from the theoretical point of view and illustrated by numerous examples and case studies. Due to its concept the book can be interesting for students as well as practitioners. This book is the successor of Maintenance Management (2000), which gave an introduction in the field.

Data Structured Software Maintenance Jun 30 2022 Data Structured Software Maintenance proposes a long-term solution to the problem of program maintenance, the largest single expense of data processing departments today. Traditional maintenance procedures cause programs to become unmaintainable over time because of the cumulative effect of changes to the system. In this book, David A. Higgins argues against the practice of patching a program and redesigning just the part that needs repair or enhancement. Instead, readers are encouraged to use a structured method like the Warnier / Orr approach to redesign and document the existing programs so that they are easier to maintain over the long term. The Warnier/Orr data structured methodology addresses more than just the coding style or the control structures of a program, and it can be applied even to programs that weren't developed with the method. The ultimate goal of Data Structured Software Maintenance is to have a good design for each program and to have the program closely match the design. Other topics include a definition of good, maintainable programs, logical and physical design, repair and modification of traditional programs, maintenance of large programs, and installation of the Warnier/Orr method into an organization. Numerous examples and more than one hundred figures illustrate the text.

Data Requirements and Maintenance of Records for Spent Fuel Management Oct 11 2020 Data collection and maintenance are an essential part of activities required in the lifetime management of spent fuel. Key data on spent fuel are required from the earliest phase of any project. To allow informed decisions for spent fuel management to be made, the data need to be maintained throughout the lifetime of spent fuel management including storage, transport, reprocessing or disposal. This publication is intended to provide a state-of-the-art review of spent fuel data management, including what data need to be gathered for the relevant activities in spent fuel management and how to maintain them by the responsible bodies at various stages of the nuclear fuel cycle.--Publisher's description.

Data Mining for Design and Manufacturing Oct 03 2022 Data Mining for Design and Manufacturing: Methods and Applications is the first book that brings together research and applications for data mining within design and manufacturing. The aim of the book is 1) to clarify the integration of data mining in engineering design and manufacturing, 2) to present a wide range of domains to which data mining can be applied, 3) to demonstrate the essential need for symbiotic collaboration of expertise in design and manufacturing, data mining, and information technology, and 4) to illustrate how to overcome central problems in design and manufacturing environments. The book also presents formal tools required to extract valuable information from design and manufacturing data, and facilitates interdisciplinary problem solving for enhanced decision making. Audience: The book is aimed at both academic and practising audiences. It can serve as a reference or textbook for senior or graduate level students in Engineering, Computer, and Management Sciences who are interested in data mining technologies. The book will be useful for practitioners interested in utilizing data mining techniques in design and manufacturing as well as for computer software developers engaged in developing data mining tools.

An Introduction to Predictive Maintenance Jun 18 2021 This second edition of An Introduction to Predictive Maintenance helps plant, process, maintenance and reliability managers and engineers to develop and implement a comprehensive maintenance management program, providing

proven strategies for regularly monitoring critical process equipment and systems, predicting machine failures, and scheduling maintenance accordingly. Since the publication of the first edition in 1990, there have been many changes in both technology and methodology, including financial implications, the role of a maintenance organization, predictive maintenance techniques, various analyses, and maintenance of the program itself. This revision includes a complete update of the applicable chapters from the first edition as well as six additional chapters outlining the most recent information available. Having already been implemented and maintained successfully in hundreds of manufacturing and process plants worldwide, the practices detailed in this second edition of *An Introduction to Predictive Maintenance* will save plants and corporations, as well as U.S. industry as a whole, billions of dollars by minimizing unexpected equipment failures and its resultant high maintenance cost while increasing productivity. A comprehensive introduction to a system of monitoring critical industrial equipment
Optimize the availability of process machinery and greatly reduce the cost of maintenance Provides the means to improve product quality, productivity and profitability of manufacturing and production plants

Supply Chain Integration Challenges in Commercial Aerospace Apr 28 2022 This book presents firsthand insights into strategies and approaches for the commercial aerospace supply chain in response to the numerous changes that airlines, aircraft OEMs and their suppliers have experienced over the past few decades. In doing so, it investigates the entire product value chain. Accordingly, the chapters address the challenges of configuration and demand, and highlight the specificities of customization in the aviation industry. They analyze component manufacturing, share valuable insights into assembly and integration activities, and describe aftermarket business models. In order to ensure more varied and balanced coverage, the book includes contributions by researchers, suppliers, and experts and practitioners from consulting companies and the aircraft industry. Taken together, they provide a holistic perspective on the transformation drivers and the innovations that have either been implemented or will be adopted in the near future. The book introduces and describes new concepts and innovations such as 3D printing, E2E demand management, digital production, predictive maintenance and open innovation in general, supplementing them with sample industrial applications from the aviation sector.

Analysis of AFM66-1 Organization and Field Maintenance Data Collection May 18 2021

Data Driven Energy Centered Maintenance May 06 2020 Over recent years, many new technologies have been introduced to drive the digital transformation in the building maintenance industry. The current trend in digital evolution involves data-driven decision making which opens new opportunities for an energy centered maintenance model. Artificial Intelligence and Machine Learning are helping the maintenance team to get to the next level of maintenance intelligence to provide real-time early warning of abnormal equipment performance. This edition follows the same methodology as the First. It provides detailed descriptions of the latest technologies associated with Artificial Intelligence and Machine Learning which enable data-driven decision-making processes about the equipment's operation and maintenance. Technical topics discussed in the book include: Different Maintenance Types and The Need for Energy Centered Maintenance The Centered Maintenance Model Energy Centered Maintenance Process Measures of Equipment and Maintenance Efficiency and Effectiveness Data-Driven Energy Centered Maintenance Model: Digitally Enabled Energy Centered Maintenance Tasks Artificial Intelligence and Machine Learning in Energy Centered Maintenance Model Capabilities and Analytics Rules Building Management System Schematics The book contains a detailed description of the digital transformation process of most of the maintenance inspection tasks as they move away from being

manually triggered. The book is aimed at building operators as well as those building automation companies who are working continuously to digitalize building operation and maintenance procedures. The benefits are reductions in the equipment failure rate, improvements in equipment reliability, increases in equipment efficiency and extended equipment lifespan.

Field Demonstrations of Advanced Data Acquisition Technology for Maintenance Management Nov 23 2021

Analysis and Design of Operational Data Management Systems for Maintenance of Parks and Urban Open Space Nov 11 2020

Introduction to Maintenance Engineering Jan 26 2022 This introductory textbook links theory with practice using real illustrative cases involving products, plants and infrastructures and exposes the student to the evolutionary trends in maintenance. Provides an interdisciplinary approach which links, engineering, science, technology, mathematical modelling, data collection and analysis, economics and management Blends theory with practice illustrated through examples relating to products, plants and infrastructures Focuses on concepts, tools and techniques Identifies the special management requirements of various engineered objects (products, plants, and infrastructures)

Updating Farm, Tract, and Crop Data Through the Maintenance Application Jun 26 2019

Maintenance and Dissemination of a Water Transfer Data Base for 12 Western States, 1987-2008 Jun 06 2020

Energy Centered Maintenance May 30 2022 Energy Centered Maintenance proves a detailed description of how to implement Energy Centered Maintenance (ECM) at any organization. It includes a new six-step technical process with detailed instructions of each of these steps explained with clear examples. Areas covered include preventative maintenance, predictive maintenance and reliability centered maintenance. ECM uses energy consumption excesses or energy waste as the primary criterion for determining specific maintenance or repair needs. Therefore, the primary purpose of this book is to provide strategies to reduce energy use by identifying equipment or items that can become energy hogs while still performing their function and prevent that from occurring. The primary reasons organizations need ECM is due to poor maintenance of energy-using systems and energy losses from motors not turning off when they should. The book includes ECM for electrical, mechanical, building transportation, HVAC, fire-fighting, water supply, drainage and storm water management systems. In some cases, ECM in data centers can help reduce energy consumption by as much as 30%. The six-step process detailed in this text will enable any organization to implement ECM in an orderly, cost effective manner thus improving your equipment and machines, lowering your energy consumption and helping save the planet.

Using the Air Force Maintenance Data Collection System Data to Identify Candidates for Improvement in Reliability and

Maintainability Jul 20 2021 This Note describes a preliminary and limited set of measures using data from the Air Force Maintenance Data Collection System (MDC) to identify likely candidates for reliability and maintainability (R & M) improvement. The method's usefulness depends on the user's having better than average knowledge of the MDC and of base-level maintenance. The MDC is a large, complex, and rich data system. Its magnitude alone is forbidding. The two-step method described shows how to distill these data, prepare useful metrics, and present these data in useful ways to R & M decisionmakers. Site investigations and interviews should be conducted to check the reasons for any high maintenance activity and to understand variability among bases before any R & M improvement program is instituted on a particular system or component.

Maintenance, Replacement, and Reliability Jan 14 2021 Since the publication of the second edition in 2013, there has been an increasing

interest in asset management globally, as evidenced by a series of international standards on asset management systems, to achieve excellence in asset management. This cannot be achieved without high-quality data and the tools for data interpretation. The importance of such requirements is widely recognized by industry. The third edition of this textbook focuses on tools for physical asset management decisions that are data driven. It also uses a theoretical foundation to the tools (mathematical models) that can be used to optimize a variety of key maintenance/replacement/reliability decisions. Problem sets with answers are provided at the end of each chapter. Also available is an extensive set of PowerPoint slides and a solutions manual upon request with qualified textbook adoptions. This new edition can be used in undergraduate or post-graduate courses on physical asset management.

A Study of the Air Force Maintenance Technical Data System Sep 29 2019 This report details the research on preparation, production, distribution, evaluation and verification of Air Force maintenance technical data. It highlights the impact of management on the procurement of accurate, timely, and economical data and identifies the areas in which management was found to be deficient. It points out the specific shortcomings in the data, in its preparation, distribution, and use. Finally, the report recommends actions considered necessary to first, improve management of the overall technical order system, and second to enhance the quality, usefulness, and timeliness of the data produced.

Guidebook on LANDFIRE Fuels Data Acquisition, Critique, Modification, Maintenance, and Model Calibration Jul 28 2019 With the advent of LANDFIRE fuels layers, an increasing number of specialists are using the data in a variety of fire modeling systems. However, a comprehensive guide on acquiring, critiquing, and editing (ACE) geospatial fuels data does not exist. This paper provides guidance on ACE as well as on assembling a geospatial fuels team, model calibration, and maintaining geospatial data and documentation. The LANDFIRE Data Access Tool (LFDAT), an ArcMap extension, and the Wildland Fire Decision Support System (WFDSS) are the primary tools outlined in this guide to obtain the Fire Area Simulator (FARSITE) landscape file (LCP) for geospatial fuels application. Other useful geographic information system (GIS) data acquisition websites and layers for geospatial fire analysis are also provided. Critiquing the data consists of (1) a tabular critique of the inputs using LCP Critique and (2) a geospatial critique of the inputs and outputs using FlamMap and ArcMap. Detailed information is provided on many of the layers that constitute the LCP (fuel model, canopy cover, stand height, crown base height, crown bulk density). Inputs are spatially critiqued using FlamMap and ArcMap in combination with the existing vegetation type layer. Outputs critiqued include flame length, rate of spread, fireline intensity, crown fire activity, and fire growth. Compare-Models-Four and Minimum Travel Time (MTT) are discussed, the WFDSS landscape editor is demonstrated as a tool to edit and update an LCP and a section on model calibration using FARSITE and MTT is included. The paper concludes with direction and discussion on data maintenance, documentation, and complexities of a national fuels dataset for field application.

Development of a Data System for a Health Maintenance Organization Sep 09 2020

Data Driven Energy Centered Maintenance Nov 04 2022 Over recent years, many new technologies have been introduced to drive the digital transformation in the building maintenance industry. The current trend in digital evolution involves data-driven decision making which opens new opportunities for an energy centered maintenance model. Artificial Intelligence and Machine Learning are helping the maintenance team to get to the next level of maintenance intelligence to provide real-time early warning of abnormal equipment performance. This edition follows the same methodology as the First. It provides detailed descriptions of the latest technologies associated with Artificial Intelligence

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Track Data-Oriented Maintenance Intervention Limit Determination for Ballasted Light Rail Tracks through Multibody Simulations Dec 01 2019 Light rail trains (LRT) are an important part of public transport but due to perceived high life-cycle costs are not always considered suitable. Life cycle cost reduction might be achieved through a knowledge-based maintenance management rather than just on experience. This work develops limits of maintenance and renewal of LRT systems based on vehicle reactions to the current track quality through measured data, multibody simulations and track geometry indices. An approach based on knowledge would lead to a track condition which allows a safe, comfortable, and under an appropriate maintenance strategy, economically profitable operation.

Software Maintenance Dec 13 2020 Designing for maintenance; The methodology revolution; Packages. Performing the maintenance function; Viewing the future.

Maintenance Data Sep 21 2021

Software Maintenance Management Dec 25 2021 Survey design and administration; the data processing organizations; the application systems; the maintenance effort; the impact of development tools and organizational controls; the problems of maintenance; questionnaire; data analysis.

Data Analysis of AFM66-1 Organization and Field Maintenance Data Collection Aug 28 2019

IoT Streams for Data-Driven Predictive Maintenance and IoT, Edge, and Mobile for Embedded Machine Learning Sep 02 2022 This book constitutes selected papers from the Second International Workshop on IoT Streams for Data-Driven Predictive Maintenance, IoT Streams 2020, and First International Workshop on IoT, Edge, and Mobile for Embedded Machine Learning, ITEM 2020, co-located with ECML/PKDD 2020 and held in September 2020. Due to the COVID-19 pandemic the workshops were held online. The 21 full papers and 3 short papers presented in this volume were thoroughly reviewed and selected from 35 submissions and are organized according to the workshops and their topics: IoT Streams 2020: Stream Learning; Feature Learning; ITEM 2020: Unsupervised Machine Learning; Hardware; Methods; Quantization.

Handbook of Data Recording, Maintenance, and Management for the Biomedical Sciences Oct 30 2019 The Handbook of Data Recording, Maintenance, and Management for the Biomedical Sciences explains how to maintain a scientific log that will withstand peer, federal, and other reviewing agencies' scrutiny. This is a timely publication as the maintenance of a log becomes an increasingly more important issue. It

covers data monitoring, recording and maintenance; quality assurance; and printed forms, and the laws and regulations that impact their design and use.

Supply Chain Management in the Big Data Era Aug 21 2021 Technological advancements in recent years have led to significant developments within a variety of business applications. In particular, data-driven research provides ample opportunity for enterprise growth, if utilized efficiently. Supply Chain Management in the Big Data Era is an authoritative reference source for the latest scholarly material on the implementation of big data analytics for improved operations and supply chain processes. Highlighting emerging strategies from different industry perspectives, this book is ideally designed for managers, professionals, practitioners, and students interested in the most recent research on supply chain innovations.

Survey Data Book and Standards for Operation and Maintenance of Physical Plant in Colleges and Universities Jul 08 2020

IoT Streams for Data-Driven Predictive Maintenance and IoT, Edge, and Mobile for Embedded Machine Learning Feb 24 2022 This book constitutes selected papers from the Second International Workshop on IoT Streams for Data-Driven Predictive Maintenance, IoT Streams 2020, and First International Workshop on IoT, Edge, and Mobile for Embedded Machine Learning, ITEM 2020, co-located with ECML/PKDD 2020 and held in September 2020. Due to the COVID-19 pandemic the workshops were held online. The 21 full papers and 3 short papers presented in this volume were thoroughly reviewed and selected from 35 submissions and are organized according to the workshops and their topics: IoT Streams 2020: Stream Learning; Feature Learning; ITEM 2020: Unsupervised Machine Learning; Hardware; Methods; Quantization.

The Naval Aviation Maintenance Program (NAMP).: Maintenance data systems Mar 04 2020

Facilities Maintenance & Repair Costs with Rsmeans Data: 60302 Apr 16 2021 The first-ever publication to address the cost of all aspects of maintaining your facility: maintenance and repair, preventive maintenance, general maintenance and complete details about the cost and repair frequencies of thousands of work items. This book provides comprehensive coverage of all aspects of buildings and grounds, from preventive maintenance schedules on large boilers, to replacing fire hydrants, to resurfacing parking lots and more.

Operations Management Aug 01 2022 Global competition has caused fundamental changes in the competitive environment of the manufacturing and service industries. Firms should develop strategic objectives that, upon achievement, result in a competitive advantage in the market place. The forces of globalization on one hand and rapidly growing marketing opportunities overseas, especially in emerging economies on the other, have led to the expansion of operations on a global scale. The book aims to cover the main topics characterizing operations management including both strategic issues and practical applications. A global environmental business including both manufacturing and services is analyzed. The book contains original research and application chapters from different perspectives. It is enriched through the analyses of case studies.

Efficient Maintenance and Recovery of Data Warehouses Feb 12 2021 Abstract: "Data warehouses collect data from multiple remote sources and integrate the information as materialized views in a local database. The materialized views are used to answer queries that analyze the collected data for patterns, anomalies, and trends. This type of query processing is often called on-line analytical processing (OLAP). So that OLAP queries can be posed and answered easily, the data from the remote sources is 'cleansed' and translated to a common schema. The

warehouse views must be updated when changes are made to the remote information sources. Otherwise, the answers to OLAP queries are based on stale data. Answering OLAP queries based on stale data is clearly a problem especially if (answers to) OLAP queries are used to support critical decisions made by the organization that owns the data warehouse. Because the primary purpose of the data warehouse is to answer OLAP queries, only a limited amount of time and/or resources can be devoted to the warehouse update. Hence, we have developed new techniques to ensure that the warehouse update can be done efficiently. Also, the warehouse update is not devoid of failures. Since only a limited amount of time and/or resources are devoted to the warehouse update, it is most likely infeasible to restart the warehouse update from scratch. Thus, we have developed new techniques for resuming failed warehouse updates. Finally, warehouse updates typically transfer gigabytes of data into the warehouse. Although the price of disk storage is decreasing, there will be a point in the 'lifetime' of a data warehouse when keeping and administering all of the collected [sic] is unreasonable. Thus, we have investigated techniques for reducing the storage cost of a data warehouse by selectively 'expiring' information that is not needed."

Predictive Maintenance in Smart Factories Mar 28 2022 This book presents the outcome of the European project "SERENA", involving fourteen partners as international academics, technological companies, and industrial factories, addressing the design and development of a plug-n-play end-to-end cloud architecture, and enabling predictive maintenance of industrial equipment to be easily exploitable by small and medium manufacturing companies with a very limited data analytics experience. Perspectives and new opportunities to address open issues on predictive maintenance conclude the book with some interesting suggestions of future research directions to continue the growth of the manufacturing intelligence.