

Elevator Traffic Analysis Software

Discover how to measure, control, model, and plan people flow within modern buildings with this one-stop resource from a leading professional People Flow in Buildings delivers a comprehensive and insightful description of people flow, analysis with software-based tools. The book offers readers an up-to-date overview of mathematical optimization methods used in control systems and transportation planning methods used to manage vertical and horizontal transportation. The text offers a starting point for selecting the optimal transportation equipment for new buildings and those being modernized. It provides insight into making passenger journeys pleasant and smooth, while providing readers with an examination of how modern trends in building usage, like increasingly tall buildings and COVID-19, effect people flow planning in buildings. People Flow in Buildings clearly defines the terms and symbols it includes and then moves on to deal with the measurement, control, modelling, and planning of people flow within buildings of all kinds. Each chapter contains an introduction describing its contents and the background of the subject. Included appendices describe measured passenger data and performed analyses. Readers will also benefit from the inclusion of: A thorough introduction to people-counting methods, including counting technology inside and outside buildings, passenger traffic components, and manual people-counting An examination of the passenger arrival process in building, including the Poisson arrival process and probability density function, and passenger arrivals in batches A consideration of daily vertical passenger traffic profiles, including two-way traffic profiles and the effects of inter-floor traffic An exploration of people flow solutions, including stairs, escalators, and elevators with collective and destination group control systems, as well as double-deck and multicar system People flow calculation and simulation models Elevator planning with ISO simulation method Elevator planning and evacuation of tall buildings Perfect for software designers in the private sector and academia, People Flow in Buildings will also earn a place in the libraries of elevator consultants, manufacturers, and architects who seek a one-stop reference for transportation devices from a functional and design perspective, as opposed to a hardware perspective.

The pioneering organizers of the first UML workshop in Mulhouse, France in the summer of 1998 could hardly have anticipated that, in little over a decade, their initiative would blossom into today's highly successful MODELS conference series, the premier annual gathering of researchers and practitioners focusing on a very important new technical discipline: model-based software and system engineering. This expansion is, of course, a direct consequence of the growing significance and success of model-based methods in practice. The conferences have contributed greatly to the heightened interest in the field, attracting much young talent and leading to the gradual emergence of its corresponding scientific and engineering foundations. The proceedings from the MODELS conferences are one of the primary references for anyone interested in a more substantive study of the domain. The 12th conference took place in Denver in the USA, October 4–9, 2009 along with numerous satellite workshops and tutorials, as well as several other related scientific gatherings. The conference was exceptionally fortunate to have three eminent, invited keynote speakers from industry: Stephen Mellor, Larry Constantine, and Grady Booch.

TRB's National Cooperative Highway Research Program (NCHRP) Report 672: Roundabouts: An Informational Guide - Second Edition explores the planning, design, construction, maintenance, and operation of roundabouts. The report also addresses issues that may be useful in helping to explain the trade-offs associated with roundabouts. This report updates the U.S. Federal Highway Administration's Roundabouts: An Informational Guide, based on experience gained in the United States since that guide was published in 2000.

Army Health Facility Design

Their Framework and Applications

A Process of Ongoing Improvement

12th International Conference, MODELS 2009, Denver, CO, USA, October 4-9, 2009, Proceedings

Elevator Electric Drives

Tools for the Practitioner

This second edition of this well-respected book covers all aspects of the traffic design and control of vertical transportation systems in buildings, making it an essential reference for vertical transportation engineers, other members of the design team, and researchers. The book introduces the basic principles of circulation, outlines traffic design methods and examines and analyses traffic control using worked examples and case studies to illustrate key points. The latest analysis techniques are set out, and the book is up-to-date with current technology. A unique and well-established book, this much-needed new edition features extensive updates to technology and practice, drawing on the latest international research.

Statistics and Probability for Engineering Applications provides a complete discussion of all the major topics typically covered in a college engineering statistics course. This textbook minimizes the derivations and mathematical theory, focusing instead on the information and techniques most needed and used in engineering applications. It is filled with practical techniques directly applicable on the job. Written by an experienced industry engineer and statistics professor, this book makes learning statistical methods easier for today's student. This book can be read sequentially like a normal textbook, but it is designed to be used as a handbook, pointing the reader to the topics and sections pertinent to a particular type of statistical problem. Each new concept is clearly and briefly described, whenever possible by relating it to previous topics. Then the student is given carefully chosen examples to deepen understanding of the basic ideas and how they are applied in engineering. The examples and case studies are taken from real-world engineering problems and use real data. A number of practice problems are provided for each section, with answers in the back for selected problems. This book will appeal to engineers in the entire engineering spectrum (electronics/electrical, mechanical, chemical, and civil

*engineering); engineering students and students taking computer science/computer engineering graduate courses; scientists needing to use applied statistical methods; and engineering technicians and technologists. * Filled with practical techniques directly applicable on the job * Contains hundreds of solved problems and case studies, using real data sets * Avoids unnecessary theory Describes the design and control of traffic in vertical transportation systems, covering design methods, traffic calculations, traffic control, and traffic patterns.*

Intelligent Control and Smart Energy Management

People Flow in Buildings

Pedestrian and Evacuation Dynamics 2008

How Agile Masters Deliver Great Software

Proceedings of the 2011 MESC International Conference on Multimedia, Software Engineering and Computing, November 26-27, Wuhan, China

Statistics and Probability for Engineering Applications

Transportation systems in buildings are part of everyday life: whether ferrying people twenty storeys up to the office or moving luggage at the airport, 21st-century society relies on them. This book presents the latest in analysis and control of transportation systems in buildings focusing primarily on elevator groups. The theory and design of passenger and cargo transport systems are covered, with operational examples and topics of special interest.

Guidance and general information related to vertical transportation; for architects, developers and those involved in estate and individual buildings management.

Bachelor Thesis from the year 2015 in the subject Engineering - Mechanical Engineering, grade: A, Coventry University, language: English, abstract: The purpose of this case study is to apply the fundamentals of systems engineering to the operation of an elevator system. The high-technology representation of how this elevator system works will be shown during the process of this final product. The elevator system gives easy understanding when viewed or accessed, its concept is always seen in the product. An elevator also has single vertically movement elevator system which helps in serving individuals that uses it in its simplest form. There is a button which is fixed at the elevator lobby, any individual that wants to operate on the elevator will have to press this button for easy access.

Operations Research Proceedings 1997

Roundabouts

Concepts and Principles, Control and Practice

The Engineering Design of Systems

Theory and Practice

In **Software Abstractions** Daniel Jackson introduces an approach to software design that draws on traditional formal methods but exploits automated tools to find flaws as early as possible. This approach -- which Jackson calls "lightweight formal methods" or "agile modeling" -- takes from formal specification the idea of a precise and expressive notation based on a tiny core of simple and robust concepts but replaces conventional analysis based on theorem proving with a fully automated analysis that gives designers immediate feedback. Jackson has developed Alloy, a language that captures the essence of software abstractions simply and succinctly, using a minimal toolkit of mathematical notions. This revised edition updates the text, examples, and appendixes to be fully compatible with Alloy 4.

The development of smart cities is important and beneficial to a government and its citizens. With the advent of the smartphone, rapid and reliable communication between and among individuals and governments has become ubiquitous. Everything can be connected and accessed easily with the touch of a finger. Changes in mobile internet telecommunication systems allow for the advance of new urbanization using smart city development methods. The evolution of technology in Industry 4.0, such as the advancement of cutting-edge sensors utilizing the Internet of things (IoT) concept, has wide applications in developing various smart systems. This publication analyzes the interconnected cyber-physical systems inherent in smart cities, and the development methods and applications thereof.

This new edition of a one-of-a-kind handbook provides an essential updating to keep the book current with technology and practice. New coverage of topics such as machine-room-less systems and current operation and control procedures, ensures that this revision maintains its standing as the premier general reference on vertical transportation. A team of new contributors has been assembled to shepherd the book into this new edition and provide the expertise to keep it up to date in future editions. A new copublishing partnership with Elevator World Magazine ensures that the quality of the revision is kept at the highest level, enabled by Elevator World's Editor, Bob Caporale, joining George Strakosch as co-editor.

The Agile Samurai

8th International Conference, ICAOR 2016, Rotterdam, The Netherlands, June 28-30, 2016, Proceedings

Computational Logistics

Understanding Elevator Technology

Control of Traffic Systems in Buildings

SBCCI 2006

These proceedings gather contributions presented at the 8th International Conference on Applied Operational Research (ICAOR 2016) in

Rotterdam, The Netherlands, June 28-30, 2016, published in the series Lecture Notes in Management Science (LNMS). The conference covers all aspects of Operational Research and Management Science (OR/MS) with a particular emphasis on applications. Intelligent building is the future of our building industry; all commercial, residential, industrial and institutional buildings will be designed towards the goal of 'intelligent buildings'. The most important aspect of an intelligent building is the building systems, such as electrical services, heating, ventilation and air-conditioning systems, vertical transportation systems, and life safety systems, which must operate intelligently and efficiently to enhance the activities of the occupants. Intelligent Building Systems explains what already exists in a modern intelligent building and describes what is currently being developed by researchers to improve human comfort, working efficiency and energy performance for buildings in the 21st century. Intelligent Building Systems is divided into three parts. The first part gives a quick review of the structure, terminology, layout and operating principles of most standard modern building systems. The second part introduces the background material necessary to understand intelligent building systems, including information on electronics technology, fundamental mathematics, and techniques in artificial intelligence and signal processing. These first two parts are the foundation for the final part, which consists of research works carried out by the authors and other researchers in the application of artificial intelligence to building systems. The technologies presented will encourage readers to envision new and innovative ideas on possible future applications. Intelligent Building Systems is relevant to practitioners and researchers in the area of architectural science and engineering, electrical and mechanical services and intelligent buildings. It may also be used as a text for advanced courses on the topic.

Printed in full color. Faced with a software project of epic proportions? Tired of over-committing and under-delivering? Enter the dojo of the agile samurai, where agile expert Jonathan Rasmusson shows you how to kick-start, execute, and deliver your agile projects. Combining cutting-edge tools with classic agile practices, The Agile Samurai gives you everything you need to deliver something of value every week and make rolling your software into production a non-event. Get ready to kick some software project butt. By learning the ways of the agile samurai you will discover: how to create plans and schedules your customer and your team can believe in what characteristics make a good agile team and how to form your own how to gather requirements in a fraction of the time using agile user stories what to do when you discover your schedule is wrong, and how to look like a pro correcting it how to execute fiercely by leveraging the power of agile software engineering practices By the end of this book you will know everything you need to set up, execute, and successfully deliver agile projects, and have fun along the way. If you're a project lead, this book gives you the tools to set up and lead your agile project from start to finish. If you are an analyst, programmer, tester, usability designer, or project manager, this book gives you the insight and foundation necessary to become a valuable agile team member. The Agile Samurai slices away the fluff and theory that make other books less-than-agile. It's packed with best practices, war stories, plenty of humor and hands-on tutorial exercises that will get you doing the right things, the right way. This book will make a difference.

Elevator Abstracts, Including Escalators

Design Considerations for a Software Space Elevator Simulator

Network Computing and Information Security

Smart Cities

Intelligent Building Systems

Second International Conference, NCIS 2012, Shanghai, China, December 7-9, 2012, Proceedings

The international conference on "Pedestrian and Evacuation Dynamics", held on February 27-29, 2008 at Wuppertal University in Germany, was the fourth in this series after successful meetings in Duisburg (2001), Greenwich (2003) and Vienna (2005). The conference was aimed at improving the scientific exchange between scientists, experts and practitioners of various fields of pedestrian and evacuation dynamics and featured: the analysis of evacuation processes and pedestrian motion, modeling of pedestrian dynamics in various situations, experiments on pedestrian dynamics, human behavior research, regulatory action. All these topics are included in this book to give a broad and state-of-the-art overview of pedestrian and evacuation dynamics.

New for the third edition, chapters on: Complete Exercise of the SE Process, System Science and Analytics and The Value of Systems Engineering The book takes a model-based approach to key systems engineering design activities and introduces methods and models used in the real world. This book is divided into three major parts: (1) Introduction, Overview and Basic Knowledge, (2) Design and Integration Topics, (3) Supplemental Topics. The first part provides an introduction to the issues associated with the engineering of a system. The second part covers the critical material required to understand the major elements needed in the engineering design of any system: requirements, architectures (functional, physical, and allocated),

interfaces, and qualification. The final part reviews methods for data, process, and behavior modeling, decision analysis, system science and analytics, and the value of systems engineering. Chapter 1 has been rewritten to integrate the new chapters and updates were made throughout the original chapters. Provides an overview of modeling, modeling methods associated with SysML, and IDEF0 Includes a new Chapter 12 that provides a comprehensive review of the topics discussed in Chapters 6 through 11 via a simple system – an automated soda machine Features a new Chapter 15 that reviews General System Theory, systems science, natural systems, cybernetics, systems thinking, quantitative characterization of systems, system dynamics, constraint theory, and Fermi problems and guesstimation Includes a new Chapter 16 on the value of systems engineering with five primary value propositions: systems as a goal-seeking system, systems engineering as a communications interface, systems engineering to avert showstoppers, systems engineering to find and fix errors, and systems engineering as risk mitigation The Engineering Design of Systems: Models and Methods, Third Edition is designed to be an introductory reference for professionals as well as a textbook for senior undergraduate and graduate students in systems engineering. Dennis M. Buede, PhD, has thirty-nine years' experience in both the theoretical development and engineering application of systems engineering and decision-support technologies. Dr. Buede has applied systems engineering methods throughout the federal government. He has been a Professor at George Mason University and Stevens Institute of Technology, and is currently President of Innovative Decisions, Inc. He is a Fellow of the International Council on Systems Engineering (INCOSE). William D. Miller is an Executive Principal Analyst at Innovative Decisions, Inc. and Adjunct Professor at the Stevens Institute of Technology. Mr. Miller has forty-two years' experience as an engineer, manager, consultant, and educator in the conceptualization and engineering application of communications technologies, products and services in commercial and government sectors. He is a 48-year member of the IEEE, the former Technical Director of INCOSE and the current Editor-in-Chief of INSIGHT.

Elevators move large numbers of people up and down each day, mostly without incident, thanks to a strongly developed system of safety measures and the work of highly trained and experienced professionals. In performing elevator maintenance and repair, there are numerous technical factors, not to mention huge moral and legal issues. Workers need to fully understand proper maintenance procedures so that all safeguards remain in effect. It's also essential to be aware of applicable regulations, and to maintain compliance at all times. For those serious about engaging in elevator work, the appropriate licenses must be acquired--an electrician's license and elevator mechanic's license. These are not achieved overnight. This work covers everything a student or current technician needs to know to perform elevator diagnosis, maintenance, troubleshooting, and repair, and details all the knowledge a technician must have to properly service elevators in various situations. It is also the only work that includes helpful questions and corresponding answers for those who are studying to obtain their elevator mechanic's license. Features Offers sample certification questions and answers for those looking to get their Elevator Mechanic's license. Places an emphasis on safety interlocks and the elevator system as a whole. Includes a history of elevators to give readers perspective on the industry and advancements in technology to date. Written by a renowned electrician with regular columns and contributions in Elevator World and Electrical Construction and Maintenance magazines.

Elevator Troubleshooting & Repair

A Technician's Certification Study Guide

7th International Conference, ICCL 2016, Lisbon, Portugal, September 7-9, 2016, Proceedings

Elevator Traffic Handbook

An Informational Guide

SBCCI ...

Alex Rogo is a harried plant manager working ever more desperately to try and improve performance. His factory is rapidly heading for disaster. So is his marriage. He has ninety days to save his plant - or it will be closed by corporate HQ, with hundreds of job losses. It takes a chance meeting with a colleague from student days - Jonah - to help him break out of conventional ways of thinking to see what needs to be done. Described by Fortune as a 'guru to industry' and by Businessweek as a 'genius', Eliyahu M. Goldratt was an internationally recognized leader in the development of new business management concepts and systems. This 20th anniversary edition includes a series of detailed case study interviews by David Whitford, Editor at Large, Fortune Small Business, which explore how organizations around the world have been transformed by Eli Goldratt's ideas. The story of Alex's fight to save his plant contains a serious message for all managers in industry and explains the ideas which underline the Theory of Constraints (TOC) developed by Eli Goldratt. Written in a fast-paced thriller style, The Goal is the gripping novel which is transforming management thinking throughout the Western world. It is a book to recommend to your friends in industry - even to your bosses - but not to your competitors!

This book provides an authoritative work on the design, evaluation and control of passenger traffic in lift systems. It considerably extends information contained in other texts, which concern themselves mainly with engineering matters.

This book constitutes the refereed proceedings of the 7th International Conference on Computational Logistics, ICCL 2016, held in Lisbon, Portugal, in September 2016. The 29 papers presented in this volume were carefully reviewed and selected for inclusion in the book. They are organized in topical sections entitled: container terminals and maritime transportation; intermodal transport; location and routing; (general) logistics and supply chain management.

Models and Methods

An Engineer's Handbook

Elevator & Escalator Maintenance for Building Managers

Model Driven Engineering Languages and Systems

19th Symposium on Integrated Circuits and Systems Design : Ouro Preto, Minas Gerais, Brazil : August 28-September 1, 2006 : Chip on the Mountains : Proceedings

Renewable Resources and Transportation

Acknowledgments. Basic Real-Time Concepts. Computer Hardware. Languages Issues. The Software Life Cycle. Real-Time Specification and Design Techniques. Real-Time Kernels. Intertask Commun

Synchronization. Real-Time Memory Management. System Performance Analysis and Optimization. Queuing Models. Reliability, Testing, and Fault Tolerance. Multiprocessing Systems. Hardware/Software. Real-Time Applications. Glossary. Bibliography. Index.

This book is a collection of papers from the 2009 International Conference on Signals, Systems and Automation (ICSSA 2009). The conference at a glance: - Pre-conference Workshops/Tutorials (28-29 Dec, 2009) - Plenary talks - Paper/Poster Presentation: 28-29 Dec, 2009 - Demonstrations by SKYVIEWInc, SLS Inc., BSNL, Baroda Electric Meters, SIS - On line paper submission facility on website - 200+ papers from India and abroad - Delegates from different countries including Poland, Iran, USA - Delegates from 16 states of India - Conference website is seen by more than 3000 persons across the world (28-29 Dec, 2009)

This book constitutes the proceedings of the Second International Conference on Network Computing and Information Security, NCIS 2012, held in Shanghai, China, in December 2012. The 104 papers in this volume were carefully reviewed and selected from 517 submissions. They are organized in topical sections named: applications of cryptography; authentication and non-repudiation; cloud computing and information systems; design and analysis of cryptographic algorithms; information hiding and watermarking; intelligent networked systems; multimedia computing and intelligent networked systems; wireless network security; network communication; parallel and distributed systems; security modeling and architectures; sensor network; signal and information processing; virtualization techniques; wireless network.

Real-Time Systems Design and Analysis

The Vertical Transportation Handbook

Proceedings

Logic, Language, and Analysis

Design and Analysis of a Timing Belt Elevator System. Final year report project

Mechanical and Electrical Equipment for Buildings

"An important resource, this book offers an introductory text and overview of real-time systems: systems where timeliness is a crucial part of the correctness of the system.

The book contains a pragmatic overview of key topics (computer architecture and organization, operating systems, software engineering, programming languages, and compiler theory) from the perspective of the real-time systems designer. The book is organized into chapters that are essentially self-contained. Thus, the material can be rearranged or omitted depending on the background and interests of the audience or instructor. Each chapter contains both easy and more challenging exercises that stimulate the reader to confront actual problems"--

MSEC2011 is an integrated conference concentrating its focus upon Multimedia ,Software Engineering, Computing and Education. In the proceeding, you can learn much more knowledge about Multimedia, Software Engineering ,Computing and Education of researchers all around the world. The main role of the proceeding is to be used as an exchange pillar for researchers who are working in the mentioned field. In order to meet high standard of Springer, AISC series ,the organization committee has made their efforts to do the following things. Firstly, poor quality paper has been refused after reviewing course by anonymous referee experts. Secondly, periodically review meetings have been held around the reviewers about five times for exchanging reviewing suggestions. Finally, the conference organization had several preliminary sessions before the conference. Through efforts of different people and departments, the conference will be successful and fruitful.

This book aims at providing basic technical information to the builders and architects which they normally seek from consultants. The content of this book is also expected to provide basic elevator knowledge to the students, particularly future Engineers, builders and architects. It is also my aim to help the employees of elevator companies, to get to know the elevators fully. Currently students do not get the opportunity to study about elevators. This book could lay the foundation for introducing " Basics of Elevator technology" as an elective subject. It is the author's belief that the civil, mechanical, Electrical or Electronic engineers & Architects who have done an elective in elevator engineering would find it easy to get absorbed in the Elevator industry. This book may also be a source of knowledge for the common man who manages housing societies. This book features Foreword from Mr Malhotra the former Managing Director of OTIS India and Mr Leandre Adifon the former Vice President of OTIS Worldwide Engineering, USA which justifies the value of this book.

Consultants & Consulting Organizations Directory

Proceedings of the 2009 International Conference on Signals, Systems and Automation (ICSSA 2009)

The Goal

Advances in Multimedia, Software Engineering and Computing Vol.1

Applied Operational Research

Transportation systems in buildings

People Flow in BuildingsJohn Wiley & Sons

This book contains selected papers of SOR'97, the annual joint meeting of the Deutsche Gesellschaft für Operations Research (DGOR) and the Gesellschaft für Mathematik, Ökonomie und Operations Research (GMÖ ÖR), held at the Friedrich-Schiller-Universität Jena from September 3-5, 1997. The 85 most innovative and scientifically most relevant contributed papers which were organized in 16 sections deal with diverse topics such as operations research, mathematics and statistics, business computing and economics. Seven sections are introduced by written versions of invited semiplenary lectures given by prominent representatives of their fields.

The definitive guide to environmental control systems, updated with emerging technology and trends The Interactive Resource Center is an online learning environment where instructors and students can access the tools they need to make efficient use of their time, while reinforcing and assessing their understanding of key concepts for successful understanding of the course. An access card with redemption code for the online Interactive Resource Center is included with all new, print copies or can be purchased separately. (**If you rent or purchase a used book with an access code, the access code may have been redeemed previously and you may have to purchase a new access code ISBN: 978111899616-4). The online Interactive Resource Center contains resources tied to the book, such as: Interactive Animations Interactive Self-tests Interactive Flashcards Case Studies Respondus Testbank (instructors only) Instructor ' s Manual (over 200 pages) including additional resources (Instructors only) Roadmap to the 12th Edition (Instructors only) Student Guide to the Textbook Mechanical and Electrical Equipment for Buildings, Twelfth Edition is the industry standard reference that comprehensively covers all aspects of building systems. With over 2,200 drawings and photographs, the book discusses basic theory, preliminary building design guidelines, and detailed design procedure for buildings of all sizes. The updated twelfth edition includes over 300 new illustrations, plus information on the latest design trends, codes, and technologies, while the companion website offers new interactive features including animations, additional case studies, quizzes, and more. Environmental control systems are the components of a building that keep occupants comfortable and help make the building work. Mechanical and Electrical Equipment for Buildings covers both active controls, like air conditioners and heaters, as well as passive controls like daylighting and natural ventilation. Because these systems comprise the entire energy use and costs of a building's life, the book stresses the importance of sustainability considerations during the design process, by both architects and builders. Authored by two leading green design educators, MEEB provides the most current information on low-energy architecture, including topics like: Context, comfort, and environmental resources Indoor air quality and thermal control Illumination, acoustics, and electricity Fire protection, signal systems, and transportation Occupant comfort and building usability are the most critical factors in the success of a building design, and with environmental concerns mounting, it's becoming more and more important to approach projects from a sustainable perspective from the very beginning. As the definitive guide to environmental control systems for over 75 years, Mechanical and Electrical Equipment for Buildings is a complete resource for students and professionals alike.

Lift Traffic Analysis Design and Control

Elevator Traffic Analysis, Design and Control

Software Abstractions

Selected Papers of the Symposium on Operations Research (SOR ' 97) Jena, September 3-5, 1997