ACCESS FREE FLEXSIM USER GUIDE

Modeling and Simulation of Logistics Flows 3

Volume 3 begins with an introduction to which are added four chapters focused on modeling and flow simulation in an environment in 2 or 3 dimensions (2D or 3D). They deal with different cases taken from situations found in the field. A conclusion comes close this third book: The different software used in this third volume Computer simulation of discrete flows Mixed flow simulation Flows in 3D and the evacuation simulation Flows in 3D for conveying and storage The conclusion discusses the future developments of the software and their integration into society. At the end of each volume is a bibliography and a list of web links. There is also a glossary explaining some abbreviations, acronyms and some very specific terminology of logistics and operations research.

Proceedings of 2013 4th International Asia Conference on Industrial Engineering and Management Innovation (IEMI2013)

The purpose of the 4th International Asia Conference on Industrial Engineering and Management Innovation (IEMI 2013) is to bring together researchers, engineers and practitioners interested in the application of informatics to usher in new advances in the industrial engineering and management fields.

Applied Simulation

This book constitutes the refereed proceedings of the Second International Conference on Computational Logistics, ICCL 2011, held in Hamburg, Germany, in September 2011. The 26 revised full papers presented were carefully reviewed and selected from numerous submissions. The papers are organized in topical sections on transport services, logistics systems and production, and maritime shipping and container terminals.

Computational Logistics

This book describes a variety of teaching and academic research applications that effectively utilize FlexSim to: (1) provide guidelines, methods and tools for simulation modeling and analysis in a variety of educational settings and (2) address a variety of important design and operational issues in industry. Simulation is increasingly proving to be an important tool for supporting decision-making and problem-solving processes in many disparate domains, including the design, management and improvement of a wide range of operations systems in manufacturing, logistics, healthcare, etc. Achieving resource efficiency and minimizing negative externalities from operations represent two of today’s greatest challenges; modern simulation methods can help to overcome them. FlexSim is a prominent software package for developing discrete-event, agent-based, continuous, and hybrid simulations.

FlexSim in Academe: Teaching and Research

Das Transportvolumen im Güterverkehr hat sich in den vergangenen 30 Jahren annähernd verdreifacht. Für diesen Anstieg sind unter anderem der Wegfall der europäischen Grenzen und die fortschreitende Arbeitsteilung verantwortlich. Auch in Zukunft wird das Transportvolumen weiter wachsen. Bis 2030 wird erneut ein Wachstum von 50 % erwartet. Dieses Wachstum betrifft alle Verkehrsträger. Aufgrund der angestiegenen Transportdistanzen sowie der ökologischen Vorteile nimmt auch die Bedeutung des

Schienengüterverkehrs stark zu. Damit der Schienengüterverkehr diese Herausforderungen meistern kann, müssen die Prozesse effizient und effektiv gestaltet werden. Die Dissertation von Alexander Weyers untersucht die wesentlichen Einflussfaktoren des Schienengüterverkehrs. Als Einflussfaktoren werden die Flottengröße, die Anzahl verschiedenartiger Güterwagen, die Nachfrage nach Güterwagen, die Lagerung von Güterwagen sowie die Servicezeit von Güterwagen untersucht. Für jeden Einflussfaktor werden die Auswirkungen auf die wesentlichen Kennzahlen des Güterwagenmanagements berechnet. Diese Berechnungen erfolgen anhand von Simulationsstudien, die den europäischen Schienengüterverkehr mit unterschiedlichen Parameterkonstellationen nachbilden. Das Buch wendet sich an Dozenten und Studenten der Betriebswirtschaftslehre mit den Schwerpunkten Logistik und Verkehr sowie an interessierte Führungskräfte, die sich mit dem Thema Flottenplanung auseinandersetzen.

SIL - a Simulation Language

This volume constitutes the refereed proceedings of the Third International Conference on HCI in Business, Government and Organizations, HCIBGO 2016, held as part of the 18th International Conference on Human-Computer Interaction, HCII 2016, which took place in Toronto, Canada, in July 2016. HCII 2016 received a total of 4354 submissions, of which 1287 papers were accepted for publication after a careful reviewing process. The 43 papers presented in this volume were organized in topical sections named: designing information systems; HCI in the public administration and government; HCI at work; and mobile applications and services.

Simulink Dynamic System Simulation Software

Setup and installation - Getting started - Managing the model - Editing the model - Selecting model options - Defining general elements - Building the logic - Using auxiliary tools - Running the model - Reports & graphs.

OR/MS Today

This book is about a new approach to design, construction, and facility management called building information modeling. It provides an in-dept understanding of BIM technologies, the business and organizational issues associated with its implementation, and the profound impacts that effective use of BIM can provide to all members of a project team.

SIMULINK

This book constitutes the proceedings of the XVI Multidisciplinary International Congress on Science and Technology (CIT 2021), held in Quito, Ecuador, on 14–18 June 2021, proudly organized by Universidad de las Fuerzas Armadas ESPE in collaboration with GDEON. CIT is an international event with a multidisciplinary approach that promotes the dissemination of advances in Science and Technology research through the presentation of keynote conferences. In CIT, theoretical, technical, or application works that are research products are presented to discuss and debate ideas, experiences, and challenges. Presenting high-quality, peer-reviewed papers, the book discusses the following topics: · Electrical and Electronic· Energy and Mechanics

Proceedings of the 2004 Summer Computer Simulation Conference, SCSC 2004

Defining Simulation in its broadest aspect as embodying a certain model to represent the behavior of a system, whether that may be an economic or an engineering one, with which conducting experiments is attainable. Such a technique enables the management

Applied Simulation

This volume contains the proceedings of the 4th International Conference on Frontier Computing (FC 2015), Bangkok, Thailand, September 9-11, 2015, and brings together state-of-the-art results covering many aspects of emerging computer science and information technology from international academic and industrial researchers. FC 2015 aimed at providing an open forum to reach a comprehensive understanding of the recent advances and developing trends in information technology, computer science and engineering, with themes under the scope of communication networks, business intelligence and knowledge management, web intelligence, and any related fields that prompt the development of information technology. Contributions cover a wide spectrum of topics: database and data mining, networking and communications, web and internet of things, embedded system, soft computing, social network analysis, security and privacy, optics communication, and ubiquitous/pervasive computing. Many papers have shown great academic potential and value, and in addition indicate promising directions of research in the focused realm of this conference series. Readers, including students, researchers, and industry professionals, will benefit from the results presented in this book, and it provides indicators for emerging trends for those starting their research careers.

SIL - a SImulation Language Users Guide

This book contains the proceedings of the 10th International Conference on Logistics, Informatics and Service Sciences (LISS 2020), which is co-organized by Beijing Jiaotong University, Budapest University of Technology and Economics, in July 25–28 2020. This book focuses on the “AI and data-driven technical and management innovation in logistics, informatics and services” and aims to provide new research methods, theories and applications from various areas of management and engineering. In detail the included scientific papers analyse and describe communication processes in the fields of logistics, informatics, service sciences and other related areas. The variety of papers delivers added value for both scholars and practitioners. Information and communication technologies have been providing an effective network infrastructure and development platform for logistics and service operations.

Güterwagenmanagement

In a unique and integrated approach, The Definitive Guide to Emergency Department Operational Improvement: Employing Lean Principles with Current ED Best Practices to Create the \"No Wait\" Department exposes you to the academics behind managing the complex service environment that is the ED. The book combines applied management science and ED experi

HCI in Business, Government, and Organizations: Information Systems

This book constitutes the refereed proceedings of the 14th Digital Human Modeling & Applications in Health, Safety, Ergonomics & Risk Management (DHM) Conference, held as part of the 25th International Conference, HCI International 2023, which was held virtually in Copenhagen, Denmark in July 2023. The total of 1578 papers and 396 posters included in the HCII 2023 proceedings was carefully reviewed and selected from 7472 submissions. The DHM 2023 method focuses on different areas of application and has produced works focused on human factors and ergonomics based on human models, novel approaches in healthcare and the application of artificial intelligence in medicine. Interesting applications will be shown in many sectors. Work design and productivity, robotics and intelligent systems are among this year's human-machine modeling and results reporting efforts.

ProModel Version 4.2 Manufacturing Simulation Software

This volume gathers the latest advances, innovations and applications in the field of efficiency and performance engineering, as presented by leading international researchers and engineers at the 2022 conference of the Efficiency and Performance Engineering Network (TEPEN), held in Beijing and Baotou,

China on August 18-21, 2022. Topics include vibro-acoustics monitoring, condition-based maintenance, sensing and instrumentation, machine health monitoring, maintenance auditing and organization, non-destructive testing, reliability, asset management, condition monitoring, life-cycle cost optimisation, prognostics and health management, maintenance performance measurement, manufacturing process monitoring, and robot-based monitoring and diagnostics. The contributions, which were selected through a rigorous international peer-review process, share exciting ideas that will spur novel research directions and foster new multidisciplinary collaborations.

BIM Handbook

This book covers the subject of digital manufacturing. It provides a practical guide for readers on using computer aided design (CAD), computer aided engineering (CAE) and computer aided manufacturing (CAM) and other computer assistive tools for the design of products, machines, processes and system integrations through the case studies of engineering projects. The book introduces a thorough theoretical foundation and discussion of the historical development, and enabling technologies of digital manufacturing. It also covers a broad range of computer aided tools for a variety of applications including: geometric modelling; assembly modelling; motion simulation; finite element analysis; manufacturing process simulation; machining programming; product data management; and, product lifecycle management. Practical Guide to Digital Manufacturing uses many real-world case studies to illustrate the discussed applications, making it easily readable for undergraduate and graduate students, as well as engineers with the needs of computer-aided design and manufacturing knowledge and skills.

Recent Advances in Electrical Engineering, Electronics and Energy

There are many applications that require parallel and distributed processing to allow complicated engineering, business and research problems to be solved in a reasonable time. Parallel and distributed processing is able to improve company profit, lower costs of design, production, and deployment of new technologies, and create better business environments. The major lesson learned by car and aircraft engineers, drug manufacturers, genome researchers and other specialist is that a computer system is a very powerful tool that is able to help them solving even more complicated problems. That has led computing specialists to new computer system architecture and exploiting parallel computers, clusters of clusters, and distributed systems in the form of grids. There are also institutions that do not have so complicated problems but would like to improve profit, lower costs of design and production by using parallel and distributed processing on clusters. In general to achieve these goals, parallel and distributed processing must become the computing mainstream. This implies a need for new architectures of parallel and distributed systems, new system management facilities, and new application algorithms. This also implies a need for better understanding of grids and clusters, and in particular their operating systems, scheduling algorithms, load balancing, heterogeneity, transparency, application deployment, which is of the most critical importance for their development and taking them by industry and business.

Computer Simulation Using Excel without Programming

This is an open access book. The aim of 2022 6th International Seminar on Education, Management and Social Sciences (ISEMSS 2022) is to bring together innovative academics and industrial experts in the field of Education, Management and Social Sciences to a common forum. The primary goal of the conference is to promote research and developmental activities in Education, Management and Social Sciences and another goal is to promote scientific information interchange between researchers, developers, students, and practitioners working all around the world. The conference will be held every year to make it an ideal platform for people to share views and experiences in Education, Management and Social Sciences and related areas.

The ZX Spectrum User-guide

Bringing together an international group of researchers involved in military, business, and health modeling and simulation, Conceptual Modeling for Discrete-Event Simulation presents a comprehensive view of the current state of the art in the field. The book addresses a host of issues, including: What is a conceptual model?How is conceptual modelin

Frontier Computing

The aim of this book is to present qualitative aspects of logistics operations and supply chain management which help to implement the sustainable policy principles in the companies and public sector’s institutions. Authors in individual chapters address the issues related to reverse network configuration, forward and reverse supply chain integration, CO2 reduction in transportation, improvement of the production operations and management of the recovery activities. Some best practices from different countries and industries are presented. This book will be valuable to both academics and practitioners wishing to deepen their knowledge in the field of logistics operations and management with regard to sustainability issues.

LISS 2020

\"This book provides theoretical frameworks and the latest empirical research findings used by medical professionals in the implementation of multi-agent systems\"--Provided by publisher.

The Definitive Guide to Emergency Department Operational Improvement

Transactions on HiPEAC is a new journal which aims at the timely dissemination of research contributions in computer architecture and compilation methods for high-performance embedded computer systems. It publishes original research on systems targeted at specific computing tasks as well as systems with broad application bases. Its scope covers all aspects of computer architecture, code generation and compiler optimization methods.

Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management

Object Oriented Simulation will qualify as a valuable resource to students and accomplished professionals and researchers alike, as it provides an extensive, yet comprehensible introduction to the basic principles of object-oriented modeling, design and implementation of simulation models. Key features include an introduction to modern commercial graphical simulation and animation software, accessible breakdown of OOSimL language constructs through various programming principles, and extensive tutorial materials ideal for undergraduate classroom use.

Proceedings of TEPEN 2022

Opportunistic networks allow mobile users to share information without any network infrastructure.This book is suitable for both undergraduates and postgraduates as it discusses various aspects of opportunistic networking including, foundations of ad hoc network; taxonomy of mobility models, etc.

Practical Guide to Digital Manufacturing

Since the publication of the first edition in 1982, the goal of Simulation Modeling and Analysis has always been to provide a comprehensive, state-of-the-art, and technically correct treatment of all important aspects of a simulation study. The book strives to make this material understandable by the use of intuition and numerous figures, examples, and problems. It is equally well suited for use in university courses, simulation

practice, and self study. The book is widely regarded as the “bible” of simulation and now has more than 100,000 copies in print. The book can serve as the primary text for a variety of courses; for example: • A first course in simulation at the junior, senior, or beginning-graduate-student level in engineering, manufacturing, business, or computer science (Chaps. 1 through 4, and parts of Chaps. 5 through 9). At the end of such a course, the students will be prepared to carry out complete and effective simulation studies, and to take advanced simulation courses. • A second course in simulation for graduate students in any of the above disciplines (most of Chaps. 5 through 12). After completing this course, the student should be familiar with the more advanced methodological issues involved in a simulation study, and should be prepared to understand and conduct simulation research. • An introduction to simulation as part of a general course in operations research or management science (part of Chaps. 1, 3, 5, 6, and 9).

Distributed and Parallel Computing

This book presents new vision of regional de-carbonization with concrete scheme design and substantial quantitative demonstration from original interdisciplinary studies. It provides new horizon for not only climate change, environmental conservation but also for international cooperation and peace in East Asia. The chapters introduce diverse low carbon society principles from local to global level with best practices integrating technology evolution and social innovation. While the book is designated for academics and the ultimate goal is to facilitate international climate regime making and environmental cooperation, local government and international organizations (United Nations, World Bank, and others) officers, researchers, international NGO/NPOs, consultants, students (particularly those studying environmental policy studies or international relationships), as well as reporters will find this book useful in broadening their understanding of low-carbon development in East Asia.

Proceedings of the 2022 6th International Seminar on Education, Management and Social Sciences (ISEMSS 2022)

Currently, the main operations of companies are either directly or indirectly interconnected in a global-world context. Competition has drifted from an individual to a supply chain basis, where digitalization plays a key role. Companies with better digital capabilities achieve sustainable competitive market advantages. In this context, companies must identify their current position in terms of digital capabilities, link these capabilities to supply chain performance, define their future desired competitive position and how their digital capabilities are going to help them to get there, and forecast their future desired performance not only at the individual company but also at the supply chain level. Increasing Supply Chain Performance in Digital Society considers innovative approaches to measure, manage, and project towards the future of the digital capabilities of both individual companies and supply chains. It also examines the relations these have with performance being a practical tool to identify not only where they are today in terms of digital capabilities but also where they should be long term and the resources needed to get them there. Covering a range of topics such as artificial intelligence and risk management, this reference work is ideal for practitioners, researchers, scholars, business owners, industry professionals, academicians, instructors, and students.

Conceptual Modeling for Discrete-Event Simulation

\"The BIM Handbook is an extensively researched and meticulously written book, showing evidence of years of work rather than something that has been quickly put together in the course of a few months. It brings together most of the current information about BIM, its history, as well as its potential future in one convenient place, and can serve as a handy reference book on BIM for anyone who is involved in the design, construction, and operation of buildings and needs to know about the technologies that support it. The need for such a book is indisputable, and it is terrific that Chuck Eastman and his team were able to step up to the plate and make it happen. Thanks to their efforts, anyone in the AEC industry looking for a deeper understanding of BIM now knows exactly where to look for it.\" AECbytes book review, August 28, 2008 (www.aecbytes.com/review/2008/BIMHandbook.html) DISCOVER BIM: A BETTER WAY TO BUILD

BETTER BUILDINGS Building Information Modeling (BIM) offers a novel approach to design, construction, and facility management in which a digital representation of the building process is used to facilitate the exchange and interoperability of information in digital format. BIM is beginning to change the way buildings look, the way they function, and the ways in which they are designed and built. The BIM Handbook, Second Edition provides an in-depth understanding of BIM technologies, the business and organizational issues associated with its implementation, and the profound advantages that effective use of BIM can provide to all members of a project team. Updates to this edition include: Completely updated material covering the current practice and technology in this fast-moving field Expanded coverage of lean construction and its use of BIM, with special focus on Integrated Project Delivery throughout the book New insight on the ways BIM facilitates sustainable building New information on interoperability schemas and collaboration tools Six new case studies Painting a colorful and thorough picture of the state of the art in building information modeling, the BIM Handbook, Second Edition guides readers to successful implementations, helping them to avoid needless frustration and costs and take full advantage of this paradigm-shifting approach to construct better buildings that consume fewer materials and require less time, labor, and capital resources.

Process Simulation and Optimization in Sustainable Logistics and Manufacturing

Today more than 90% of all programmable processors are employed in embedded systems. The LISA processor design platform presented in this book addresses recent design challenges and results in highly satisfactory solutions, covering all major high-level phases of embedded processor design.

Envisioning Architecture

Simulation modelling involves the development of models that imitate real-world operations, and statistical analysis of their performance with a view to improving efficiency and effectiveness. This non-technical textbook is focused towards the needs of business, engineering and computer science students, and concentrates on discrete event simulations as it is used in operations management. Stewart Robinson of Warwick Business School offers guidance through the key stages in a simulation project in terms of both the technical requirements and the project management issues surrounding it. Readers will emerge able to develop appropriate valid conceptual models, perform simulation experiments, analyse the results and draw insightful conclusions.

Multi-Agent Systems for Healthcare Simulation and Modeling: Applications for System Improvement

Transactions on High-Performance Embedded Architectures and Compilers I