
Read Book Pdf 1 Economics In Methods Optimization

Thank you utterly much for downloading **Pdf 1 Economics In Methods Optimization**. Most likely you have knowledge that, people have see numerous times for their favorite books afterward this Pdf 1 Economics In Methods Optimization, but end up in harmful downloads.

Rather than enjoying a good book subsequently a cup of coffee in the afternoon, then again they juggled gone some harmful virus inside their computer. **Pdf 1 Economics In Methods Optimization** is to hand in our digital library an online entry to it is set as public suitably you can download it instantly. Our digital library saves in combination countries, allowing you to get the most less latency times to download any of our books taking into consideration this one. Merely said, the Pdf 1 Economics In Methods Optimization is universally compatible considering any devices to read.

KEY=METHODS - GIOVANNA BRYLEE

Optimization Methods for a Stakeholder Society

A Revolution in Economic Thinking by Multi-objective Optimization

Springer Science & Business Media For both public and private managers, the book **Optimization Methods for a Stakeholder Society** is today's key to answer the problem of a sustainable development world. This world has to take into account the meaning of all stakeholders involved and has to reconcile a number of objectives, such as economic growth, employment and preservation of the ecosystem. Traditional methods, such as cost-benefit, are outmoded as they translate all these objectives into monetary costs, a materialistic approach. On the contrary, objectives have rather to stick to their own units, eventually indicators.

Affective, Interactive and Cognitive Methods for E-Learning Design: Creating an Optimal Education Experience

Creating an Optimal Education Experience

IGI Global "This book focuses on the study and application of human computer interaction principles in the design of online education"--Provided by publisher.

Convex Optimization

Cambridge University Press A comprehensive introduction to the tools, techniques and applications of convex optimization.

Evolutionary Multi-Criterion Optimization

Third International Conference, EMO 2005, Guanajuato, Mexico, March 9-11, 2005, Proceedings

Springer Science & Business Media This book constitutes the refereed proceedings of the Third International Conference on Evolutionary Multi-Criterion Optimization, EMO 2005, held in Guanajuato, Mexico, in March 2005. The 59 revised full papers presented together with 2 invited papers and the summary of a tutorial were carefully reviewed and selected from the 115 papers submitted. The papers are organized in topical sections on algorithm improvements, incorporation of preferences, performance analysis and comparison, uncertainty and noise, alternative methods, and applications in a broad variety of fields.

Handbook of Research on Smart Computing for Renewable Energy and Agro-Engineering

IGI Global The rise in population and the concurrently growing consumption rate necessitates the evolution of agriculture to adopt current computational technologies to increase production at a faster and smoother scale. While existing technologies may help in crop processing, there is a need for studies that seek to understand how modern approaches like artificial intelligence, fuzzy logic, and hybrid algorithms can aid the agricultural process while utilizing energy sources efficiently. The Handbook of Research on Smart Computing for Renewable Energy and Agro-Engineering is an essential publication that examines the benefits and barriers of implementing computational models to agricultural production and energy sources as well as how these models can produce more cost-effective and sustainable solutions. Featuring coverage on a wide range of topics such as bacterial foraging, swarm intelligence, and combinatorial optimization, this book is ideally designed for agricultural engineers, farmers, municipal union leaders, computer scientists, information technologists, sustainable developers, managers, environmentalists, industry professionals, academicians, researchers, and students.

Optimizing Current Strategies and Applications in Industrial Engineering

IGI Global The field of industrial engineering continues to advance at a rapid rate due to innovative technologies such as robotics and automation that improve performance and efficiencies. Emerging research on these latest trends, strategies, and techniques is needed to ensure that industry professionals remain up to date on the best practices for success. **Optimizing Current Strategies and Applications in Industrial Engineering** is a pivotal reference source that provides vital research on the development, improvement, implementation, and evaluation of integrated systems in engineering. While highlighting topics such as engineering economy, material handling, and operations management, this book is ideally designed for engineers, policymakers, educators, researchers, and practitioners.

Optimization Methods Applied to Power Systems

Volume 1

MDPI This book presents an interesting sample of the latest advances in optimization techniques applied to electrical power engineering. It covers a variety of topics from various fields, ranging from classical optimization such as Linear and Nonlinear Programming and Integer and Mixed-Integer Programming to the most modern methods based on bio-inspired metaheuristics. The featured papers invite readers to delve further into emerging optimization techniques and their real application to case studies such as conventional and renewable energy generation, distributed generation, transport and distribution of electrical energy, electrical machines and power electronics, network optimization, intelligent systems, advances in electric mobility, etc.

Optimization in Economic Theory

Oxford University Press on Demand A new edition of a student text which provides a broad study of optimization methods. It builds on the base of simple economic theory, elementary linear algebra and calculus, and reinforces each new mathematical idea by relating it to its economic application.

Multi-Objective Optimization in Theory and Practice I: Classical Methods

Bentham Science Publishers Multi-Objective Optimization in Theory and Practice is a traditional two-part approach to solving multi-objective optimization (MOO) problems namely the use of classical methods and evolutionary algorithms. This first book is devoted to classical methods including the extended simplex method by Zeleny and preference-based techniques. This part covers three main topics through nine chapters. The first topic focuses on the design of such MOO problems, their complexities including nonlinearities and uncertainties, and optimality theory. The second topic introduces the founding solving methods including the extended simplex method to linear MOO problems and weighting objective methods. The third topic deals with particular structures of MOO problems, such as mixed-integer programming, hierarchical programming, fuzzy logic programming, and bimatrix games. Multi-Objective Optimization in Theory and Practice is a user-friendly book with detailed, illustrated calculations, examples, test functions, and small-size applications in Mathematica® (among other mathematical packages) and from scholarly literature. It is an essential handbook for students and teachers involved in advanced optimization courses in engineering, information science, and mathematics degree programs.

POWER SYSTEM OPTIMIZATION

PHI Learning Pvt. Ltd. **Power System Optimization** is intended to introduce the methods of multi-objective optimization in integrated electric power system operation, covering economic, environmental, security and risk aspects as well. Evolutionary algorithms which mimic natural evolutionary principles to constitute random search and optimization procedures are appended in this new edition to solve generation scheduling problems. Written in a student-friendly style, the book provides simple and understandable basic computational concepts and algorithms used in generation scheduling so that the readers can develop their own programs in any high-level programming language. This clear, logical overview of generation scheduling in electric power systems permits both students and power engineers to understand and apply optimization on a dependable basis. The book is particularly easy-to-use with sound and consistent terminology and perspective throughout. This edition presents systematic coverage of local and global optimization techniques such as binary- and real-coded genetic algorithms, evolutionary algorithms, particle swarm optimization and differential evolutionary algorithms. The economic dispatch problem presented, considers higher-order nonlinearities and discontinuities in input-output characteristics in fossil fuel burning plants due to valve-point loading, ramp-rate limits and prohibited operating zones. Search optimization techniques presented are those which participate efficiently in decision making to solve the multiobjective optimization problems. Stochastic optimal generation scheduling is also updated in the new edition. Generalized Z-bus distribution factors (GZBDF) are presented to compute the active and reactive power flow on transmission lines. The interactive decision making methodology based on fuzzy set theory, in order to determine the optimal generation allocation to committed generating units, is also discussed. This book is intended to meet the needs of a diverse range of groups interested in the application of optimization techniques to power system operation. It requires only an elementary knowledge of numerical techniques and matrix operation to understand most of the topics. It is designed to serve as a textbook for postgraduate electrical engineering students, as well as a reference for faculty, researchers, and power engineers interested in the use of optimization as a tool for reliable and secure economic operation of power systems. **Key Features** The book discusses : Load flow techniques and economic dispatch—both classical and rigorous Economic dispatch considering valve-point loading, ramp-rate limits and prohibited operating zones Real coded genetic algorithms for economic dispatch Evolutionary programming for economic dispatch Particle swarm optimization for economic dispatch Differential evolutionary algorithm for economic dispatch Stochastic multiobjective thermal power dispatch with security Generalized Z-bus distribution factors to compute line flow Stochastic multiobjective hydrothermal generation scheduling Multiobjective thermal power dispatch using artificial neural networks Fuzzy multiobjective generation scheduling Multiobjective generation scheduling by searching weight pattern

Handbook on Optimal Growth 1

Discrete Time

Springer Science & Business Media **The problem of efficient or optimal allocation of resources is a fundamental concern of economic analysis. This book provides surveys of significant results of the theory of optimal growth, as well as the techniques of dynamic optimization theory on which they are based. Armed with the results and methods of this theory, a researcher will be in an advantageous position to apply these versatile methods of analysis to new issues in the area of dynamic economics.**

Computational Methods for Risk Management in Economics and Finance

MDPI **At present, computational methods have received considerable attention in economics and finance as an alternative to conventional analytical and numerical paradigms. This Special Issue brings together both theoretical and application-oriented contributions, with a focus on the use of computational techniques in finance and economics. Examined topics span on issues at the center of the literature debate, with an eye not only on technical and theoretical aspects but also very practical cases.**

Modeling, Dynamics, Optimization and Bioeconomics I

Contributions from ICMOD 2010 and the 5th Bioeconomy Conference 2012

Springer **This volume explores the emerging and current, cutting-edge theories and methods of modeling, optimization, dynamics and bio economy. It provides an overview of the main issues, results and open questions in these fields as well as covers applications to biology, economy, energy, industry, physics, psychology and finance. The majority of the contributed papers for this volume come from the participants of the International Conference on Modeling, Optimization and Dynamics (ICMOD 2010), a satellite conference of EURO XXIV Lisbon 2010, which took place at Faculty of Sciences of University of Porto, Portugal and from the Berkeley Bio economy Conference 2012, at the University of California, Berkeley, USA.**

Handbook of Research on Metaheuristics for Order Picking Optimization in Warehouses to Smart Cities

IGI Global **Building accurate algorithms for the optimization of picking orders is a difficult task, especially when one considers the delays of real-world situations. In warehouse environments, diverse algorithms must be developed to enhance the global performance relating to combining customer orders into picking orders to reduce wait times. The Handbook of Research on Metaheuristics for Order Picking Optimization in Warehouses to Smart Cities is a pivotal reference source that addresses strategies for developing able algorithms in order to build better picking orders and the impact of these strategies on the picking systems in which diverse algorithms are implemented. While highlighting topics such ABC optimization, environmental intelligence, and order batching, this publication examines common picking aspects in warehouse environments ranging from manual order picking systems to automated retrieval systems. This book is intended for researchers, teachers, engineers, managers, and practitioners seeking research on algorithms to enhance the order picking performance.**

Meta-Heuristics Optimization Algorithms in Engineering, Business, Economics, and Finance

IGI Global **Optimization techniques have developed into a significant area concerning industrial, economics, business, and financial systems. With the development of engineering and financial systems, modern optimization has played an important role in service-centered operations and as such has attracted more attention to this field. Meta-heuristic hybrid optimization is a newly development mathematical framework based optimization technique. Designed by logicians, engineers, analysts, and many more, this technique aims to study the complexity of algorithms and problems. Meta-Heuristics Optimization Algorithms in Engineering, Business, Economics, and Finance explores the emerging study of meta-heuristics optimization algorithms and methods and their role in innovated real world practical applications. This book is a collection of research on the areas of meta-heuristics optimization algorithms in engineering, business, economics, and finance and aims to be a comprehensive reference for decision makers, managers, engineers, researchers, scientists, financiers, and economists as well as industrialists.**

Econometric Methods for Analyzing Economic Development

IGI Global **Exploring and understanding the analysis of economic development is essential as global economies continue to experience extreme fluctuation. Econometrics brings together statistical methods for practical content and economic relations. Econometric Methods for Analyzing Economic Development is a comprehensive collection that focuses on various regions and their economies at a pivotal time when the majority of nations are struggling with stabilizing their economies. Outlining areas such as employment rates, utilization of natural resources, and regional impacts, this collection of research is an excellent tool for scholars, academics, and professionals looking to expand their knowledge on today's turbulent and changing economy.**

Introductory Mathematical Economics

D.C. Heath & Company

Optimization Techniques for Problem Solving in Uncertainty

IGI Global **When it comes to optimization techniques, in some cases, the available information from real models may not be enough to construct either a probability distribution or a membership function for problem solving. In such cases, there are various theories that can be used to quantify the uncertain aspects. Optimization Techniques for Problem Solving in Uncertainty is a scholarly reference resource that looks at uncertain aspects involved in different disciplines and applications. Featuring coverage on a wide range of topics including uncertain preference, fuzzy multilevel programming, and metaheuristic applications, this book is geared towards engineers, managers, researchers, and post-graduate students seeking emerging research in the field of optimization.**

Optimization and Security Challenges in Smart Power Grids

Springer Science & Business Media This book provides an overview of state-of-the-art research on “Systems and Optimization Aspects of Smart Grid Challenges.” The authors have compiled and integrated different aspects of applied systems optimization research to smart grids, and also describe some of its critical challenges and requirements. The promise of a smarter electricity grid could significantly change how consumers use and pay for their electrical power, and could fundamentally reshape the current industry. Gaining increasing interest and acceptance, Smart Grid technologies combine power generation and delivery systems with advanced communication systems to help save energy, reduce energy costs and improve reliability. Taken together, these technologies support new approaches for load balancing and power distribution, allowing optimal runtime power routing and cost management. Such unprecedented capabilities, however, also present a set of new problems and challenges at the technical and regulatory levels that must be addressed by industry and the research community.

Economic Modeling Using Artificial Intelligence Methods

Springer Science & Business Media **Economic Modeling Using Artificial Intelligence Methods** examines the application of artificial intelligence methods to model economic data. Traditionally, economic modeling has been modeled in the linear domain where the principles of superposition are valid. The application of artificial intelligence for economic modeling allows for a flexible multi-order non-linear modeling. In addition, game theory has largely been applied in economic modeling. However, the inherent limitation of game theory when dealing with many player games encourages the use of multi-agent systems for modeling economic phenomena. The artificial intelligence techniques used to model economic data include: multi-layer perceptron neural networks radial basis functions support vector machines rough sets genetic algorithm particle swarm optimization simulated annealing multi-agent system incremental learning fuzzy networks Signal processing techniques are explored to analyze economic data, and these techniques are the time domain methods, time-frequency domain methods and fractals dimension approaches. Interesting economic problems such as causality versus correlation, simulating the stock market, modeling and controlling inflation, option pricing, modeling economic growth as well as portfolio optimization are examined. The relationship between economic dependency and interstate conflict is explored, and knowledge on how economics is useful to foster peace - and vice versa - is investigated. **Economic Modeling Using Artificial Intelligence Methods** deals with the issue of causality in the non-linear domain and applies the automatic relevance determination, the evidence framework, Bayesian approach and Granger causality to understand causality and correlation. **Economic Modeling Using Artificial Intelligence Methods** makes an important contribution to the area of econometrics, and is a valuable source of reference for graduate students, researchers and financial practitioners.

Papers in ITJEMAST 11(16) 2020

International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies **International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies** publishes a wide spectrum of research and technical articles as well as reviews, experiments, experiences, modelings, simulations, designs, and innovations from engineering, sciences, life sciences, and related disciplines as well as interdisciplinary/cross-disciplinary/multidisciplinary subjects. Original work is required. Article submitted must not be under consideration of other publishers for publications.

Frontier Information Technology and Systems Research in Cooperative Economics

Springer Nature This book is the very first book-length study devoted to the advances in technological development and systems research in cooperative economics. The chapters provide, first of all, a coherent framework for understanding and applying the concepts and approaches of complexity and systems science for the advanced study of cooperative networks and particular cooperative enterprises and communities. Second, the book serves as a unique source of reliable information on the frontier information technologies available for the production, consumer, credit, and agricultural cooperative enterprises, discussing predominant strategies, potential drivers of change, and responses to complex problems. Given the diverse range of backgrounds and advanced research results, researchers, decision-makers, and stakeholders from all fields of cooperative economics in any country of the world will undoubtedly benefit from this book.

Advances in Principal Component Analysis

BoD - Books on Demand This book describes and discusses the use of principal component analysis (PCA) for different types of problems in a variety of disciplines, including engineering, technology, economics, and more. It presents real-world case studies showing how PCA can be applied with other algorithms and methods to solve both large and small and static and dynamic problems. It also examines improvements made to PCA over the years.

Post-Optimal Analysis in Linear Semi-Infinite Optimization

Springer Science & Business Media **Post-Optimal Analysis in Linear Semi-Infinite Optimization** examines the following topics in regards to linear semi-infinite optimization: modeling uncertainty, qualitative stability analysis, quantitative stability analysis and sensitivity analysis. Linear semi-infinite optimization (LSIO) deals with linear optimization problems where the dimension of the decision space or the number of constraints is infinite. The authors compare the post-optimal analysis with alternative approaches to uncertain LSIO problems and provide readers with criteria to choose the best way to model a given uncertain LSIO problem depending on the nature and quality of the data along with the available software. This work also contains open problems which readers will find intriguing and challenging. **Post-Optimal Analysis in Linear Semi-Infinite Optimization** is aimed toward researchers, graduate and post-graduate students of mathematics interested in optimization, parametric optimization and related topics.

Sustaining Power Resources through Energy Optimization and Engineering

IGI Global As the world continues to evolve technologically, people depend more heavily on energy-dependent systems to fulfill their daily needs. However, as these needs grow, it is important to develop sustainable systems that are reliable, as well as environmentally sound. **Sustaining Power Resources through Energy Optimization and Engineering** highlights the sustainable development and efficient operation of energy systems being provided to consumers. Featuring emergent research and trends within the area of power optimization and engineering, this book is a crucial reference source for engineers, researchers, sustainability experts, and professionals interested in the improvement and usage of infrastructural energy systems.

Innovative Computing, Optimization and Its Applications

Modelling and Simulations

Springer This book presents the latest research of the field of optimization, modeling and algorithms, discussing the real-world application problems associated with new innovative methodologies. The requirements and demands of problem solving have been increasing exponentially and new computer science and engineering technologies have reduced the scope of data coverage worldwide. The recent advances in information communication technology (ICT) have contributed to reducing the gaps in the coverage of domains around the globe. The book is a valuable reference work for researchers in the fields of computer science and engineering with a particular focus on modeling, simulation and optimization as well as for postgraduates, managers, economists and decision makers

Handbook of Research on Social and Organizational Dynamics in the Digital Era

IGI Global Technology in the world today impacts every aspect of society and has infiltrated every industry, affecting communication, management, security, etc. With the emergence of such technologies as IoT, big data, cloud computing, AI, and virtual reality, organizations have had to adjust the way they conduct business to account for changing consumer behaviors and increasing data protection awareness. The **Handbook of Research on Social and Organizational Dynamics in the Digital Era** provides relevant theoretical frameworks and the latest empirical research findings on all aspects of social issues impacted by information technology in organizations and inter-organizational structures and presents the conceptualization of specific social issues and their associated constructs. Featuring coverage on a broad range of topics such as business management, knowledge management, and consumer behavior, this publication seeks to advance the practice and understanding of technology and the impacts of technology on social behaviors and norms in the workplace and society. It is intended for business professionals, executives, IT practitioners, policymakers, students, and researchers.

Optimizing Current Practices in E-Services and Mobile Applications

IGI Global In the modern world of mobile applications, the expansion of e-services, self-services, and mobile communication constantly allows for new multidisciplinary developments in academia and industry. **Optimizing Current Practices in E-Services and Mobile Applications** is a critical scholarly resource that examines issues in the production management, delivery, and consumption of e-services. Featuring coverage on a broad range of topics, such as marketing, management, social media, and entrepreneurship, this book is an ideal resource for professionals, researchers, academicians, and industry consultants with an interest in the emergence of e-services.

Handbook of Computational Economics

Newnes Handbook of Computational Economics summarizes recent advances in economic thought, revealing some of the potential offered by modern computational methods. With computational power increasing in hardware and algorithms, many economists are closing the gap between economic practice and the frontiers of computational mathematics. In their efforts to accelerate the incorporation of computational power into mainstream research, contributors to this volume update the improvements in algorithms that have sharpened econometric tools, solution methods for dynamic optimization and equilibrium models, and applications to public finance, macroeconomics, and auctions. They also cover the switch to massive parallelism in the creation of more powerful computers, with advances in the development of high-power and high-throughput computing. Much more can be done to expand the value of computational modeling in economics. In conjunction with volume one (1996) and volume two (2006), this volume offers a remarkable picture of the recent development of economics as a science as well as an exciting preview of its future potential. Samples different styles and approaches, reflecting the breadth of computational economics as practiced today Focuses on problems with few well-developed solutions in the literature of other disciplines Emphasizes the potential for increasing the value of computational modeling in economics

Novel Advancements in Electrical Power Planning and Performance

IGI Global As the demand for efficient energy sources continues to grow, electrical systems are becoming more essential to meet these increased needs. Electrical generation and transmission plans must remain cost-effective, reliable, and flexible for further future expansion. As these systems are being utilized more frequently, it becomes imperative to find ways of optimizing their overall function. **Novel Advancements in Electrical Power Planning and Performance** is an essential reference source that provides vital research on the specific challenges, issues, strategies, and solutions that are associated with electrical transmission and distribution systems and features emergent methods and research in the systemic and strategic planning of energy usage. Featuring research on topics such as probabilistic modeling, voltage stability, and radial distribution, this book is ideally designed for electrical engineers, practitioners, power plant managers, investors, industry professionals, researchers, academicians, and students seeking coverage on the methods and profitability of electrical expansion planning.

Handbook of Research Methods and Applications in Empirical Microeconomics

Edward Elgar Publishing Written in a comprehensive yet accessible style, this **Handbook** introduces readers to a range of modern empirical methods with applications in microeconomics, illustrating how to use two of the most popular software packages, Stata and R, in microeconomic applications.

Optimization Methods in Finance

Cambridge University Press Optimization models play an increasingly important role in financial decisions. This is the first textbook devoted to explaining how recent advances in optimization models, methods and software can be applied to solve problems in computational finance more efficiently and accurately. Chapters discussing the theory and efficient solution methods for all major classes of optimization problems alternate with chapters illustrating their use in modeling problems of mathematical finance. The reader is guided through topics such as volatility estimation, portfolio optimization problems and constructing an index fund, using techniques such as nonlinear optimization models, quadratic programming formulations and integer programming models respectively. The book is based on Master's courses in financial engineering and comes with worked examples, exercises and case studies. It will be welcomed by applied mathematicians, operational researchers and others who work in mathematical and computational finance and who are seeking a text for self-learning or for use with courses.

Embedded Systems

Theory and Design Methodology

BoD - Books on Demand Nowadays, embedded systems - the computer systems that are embedded in various kinds of devices and play an important role of specific control functions, have permitted various aspects of industry. Therefore, we can hardly discuss our life and society from now onwards without referring to embedded systems. For wide-ranging embedded systems to continue their growth, a number of high-quality fundamental and applied researches are indispensable. This book contains 19 excellent chapters and addresses a wide spectrum of research topics on embedded systems, including basic researches, theoretical studies, and practical work. Embedded systems can be made only after fusing miscellaneous technologies together. Various technologies condensed in this book will be helpful to researchers and engineers around the world.

Dynamic Optimization, Second Edition

The Calculus of Variations and Optimal Control in Economics and Management

Courier Corporation Since its initial publication, this text has defined courses in dynamic optimization taught to economics and management science students. The two-part treatment covers the calculus of variations and optimal control. 1998 edition.

Economics of Power Systems

Springer Nature This book describes the latest microeconomic concepts and operations research (OR) techniques needed to comprehend the design and operation of power markets, as well as the actions of their agents: producers, consumers, operators, and regulators. This is critical when it comes to addressing a constantly evolving power system environment that incorporates an increasing number of no-marginal-cost renewable sources, increasingly competitive storage facilities, increasingly responsive demands, and widespread communication channels that allow distributed decision-making. Such evolving environments call for a re-examination of the microeconomic concepts and OR techniques required by graduate students and practitioners in the electric energy field. This accessible, tutorial-style book features numerous illustrative examples to help readers grasp the economic concepts and OR procedures used by power market professionals. The authors explain these concepts and procedures and present a vision of a renewable-dominated marketplace. Each chapter also includes exercises.

Research Anthology on Multi-Industry Uses of Genetic Programming and Algorithms

IGI Global Genetic programming is a new and evolutionary method that has become a novel area of research within artificial intelligence known for automatically generating high-quality solutions to optimization and search problems. This automatic aspect of the algorithms and the mimicking of natural selection and genetics makes genetic programming an intelligent component of problem solving that is highly regarded for its efficiency and vast capabilities. With the ability to be modified and adapted, easily distributed, and effective in large-scale/wide variety of problems, genetic algorithms and programming can be utilized in many diverse industries. This multi-industry uses vary from finance and economics to business and management all the way to healthcare and the sciences. The use of genetic programming and algorithms goes beyond human capabilities, enhancing the business and processes of various essential industries and improving functionality along the way. The **Research Anthology on Multi-Industry Uses of Genetic Programming and Algorithms** covers the implementation, tools and technologies, and impact on society that genetic programming and algorithms have had throughout multiple industries. By taking a multi-industry approach, this book covers the fundamentals of genetic programming through its technological benefits and challenges along with the latest advancements and future outlooks for computer science. This book is ideal for academicians, biological engineers, computer programmers, scientists, researchers, and upper-level students seeking the latest research on genetic programming.

Supply Chain Optimization, Design, and Management: Advances and Intelligent Methods

Advances and Intelligent Methods

IGI Global Computational Intelligence (CI) is a term corresponding to a new generation of algorithmic methodologies in artificial intelligence, which combines elements of learning, adaptation, evolution and approximate (fuzzy) reasoning to create programs that can be considered intelligent. **Supply Chain Optimization, Design, and Management: Advances and Intelligent Methods** presents computational intelligence methods for addressing supply chain issues. Emphasis is given to techniques that provide effective solutions to complex supply chain problems and exhibit superior performance to other methods of operations research.

Computational Techniques for Econometrics and Economic Analysis

Springer Science & Business Media It is unlikely that any frontier of economics/econometrics is being pushed faster, further than that of computational techniques. The computer has become a tool for performing as well as an environment in which to perform economics and econometrics, taking over where theory bogs down, allowing at least approximate answers to questions that defy closed mathematical or analytical solutions. Tasks may now be attempted that were hitherto beyond human potential, and all the forces available can now be marshalled efficiently, leading to the achievement of desired goals. Computational Techniques for Econometrics and Economic Analysis is a collection of recent studies which exemplify all these elements, demonstrating the power that the computer brings to the economic analysts. The book is divided into four parts: 1 -- the computer and econometric methods; 2 -- the computer and economic analysis; 3 -- computational techniques for econometrics; and 4 -- the computer and econometric studies.

Business Intelligence in Economic Forecasting: Technologies and Techniques

Technologies and Techniques

IGI Global With the rapid development of economic globalization and information technology, the field of economic forecasting continues its expeditious advancement, providing business and government with applicable technologies. This book discusses various business intelligence techniques including neural networks, support vector machine, genetic programming, clustering analysis, TEI@I, fuzzy systems, text mining, and many more. It serves as a valuable reference for professionals and researchers interested in BI technologies and their practical applications in economic forecasting, as well as policy makers in business organizations and governments.

Optimal Unemployment Insurance

Mohr Siebeck Designing a good unemployment insurance scheme is a delicate matter. In a system with no or little insurance, households may be subject to a high income risk, whereas excessively generous unemployment insurance systems are known to lead to high unemployment rates and are costly both from a fiscal perspective and for society as a whole. Andreas Pollak investigates what an optimal unemployment insurance system would look like, i.e. a system that constitutes the best possible compromise between income security and incentives to work. Using theoretical economic models and complex numerical simulations, he studies the effects of benefit levels and payment durations on unemployment and welfare. As the models allow for considerable heterogeneity of households, including a history-dependent labor productivity, it is possible to analyze how certain policies affect individuals in a specific age, wealth or skill group. The most important aspect of an unemployment insurance system turns out to be the benefits paid to the long-term unemployed. If this parameter is chosen too high, a large number of households may get caught in a long spell of unemployment with little chance of finding work again. Based on the predictions in these models, the so-called "Hartz IV" labor market reform recently adopted in Germany should have highly favorable effects on the unemployment rates and welfare in the long run.