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KEY=THEORY - ROBERSON SNYDER

Modeling and Simulation of Logistics Flows 1

Theory and Fundamentals

John Wiley & Sons Volume 1 presents successively an introduction followed by 10 chapters and a conclusion: A logistic approach an overview of operations research The basics of graph theory calculating optimal routes Dynamic programming planning and scheduling with PERT and MPM the waves of calculations in a network spanning trees and touring linear programming modeling of road traffic

Introduction to Random Graphs

Cambridge University Press The text covers random graphs from the basic to the advanced, including numerous exercises and recommendations for further reading.

Modeling and Simulation of Logistics Flows 2

Dashboards, Traffic Planning and Management

John Wiley & Sons Volume 2 begins with an introduction and 4 chapters implementing software tools on cases of practical applications and it ends with a conclusion: The various tools used in this volume Operational research with a spreadsheet Dashboards with spreadsheets and pivot tables Scheduling and planning with a project manager The traffic simulation The conclusion shows the new features that are expected to emerge on spreadsheets as well as project managers, developments and convergences between traffic simulators and new infrastructure that are emerging on road networks. Annex 1 focuses on the installation Solver in Microsoft Excel and Annex 2 focuses on the installation of the Java Development Kit.

Adventures in Graph Theory

Birkhäuser This textbook acts as a pathway to higher mathematics by seeking and illuminating the connections between graph theory and diverse fields of mathematics, such as calculus on manifolds, group theory, algebraic curves, Fourier analysis, cryptography and other areas of combinatorics. An overview of graph theory definitions and polynomial invariants for graphs prepares the reader for the subsequent dive into the applications of graph theory. To pique the reader's interest in areas of possible exploration, recent results in mathematics appear throughout the book, accompanied with examples of related graphs, how they arise, and what their valuable uses are. The consequences of graph theory covered by the authors are complicated and far-reaching, so topics are always exhibited in a user-friendly manner with copious graphs, exercises, and Sage code for the computation of equations. Samples of the book's source code can be found at github.com/springer-math/adventures-in-graph-theory. The text is geared towards advanced undergraduate and graduate students and is particularly useful for those trying to decide what type of problem to tackle for their dissertation. This book can also serve as a reference for anyone interested in exploring how they can apply graph theory to other parts of mathematics.

Graph Theory with Applications to Engineering and Computer Science

PHI Learning Pvt. Ltd. Because of its inherent simplicity, graph theory has a wide range of applications in engineering, and in physical sciences. It has of course uses in social sciences, in linguistics and in numerous other areas. In fact, a graph can be used to represent almost any physical situation involving discrete objects and the relationship among them. Now with the solutions to engineering and other problems becoming so complex leading to larger graphs, it is virtually difficult to analyze without the use of computers. This book is recommended in IIT Kharagpur, West

Bengal for B.Tech Computer Science, NIT Arunachal Pradesh, NIT Nagaland, NIT Agartala, NIT Silchar, Gauhati University, Dibrugarh University, North Eastern Regional Institute of Management, Assam Engineering College, West Bengal University of Technology (WBUT) for B.Tech, M.Tech Computer Science, University of Burdwan, West Bengal for B.Tech. Computer Science, Jadavpur University, West Bengal for M.Sc. Computer Science, Kalyani College of Engineering, West Bengal for B.Tech. Computer Science. Key Features: This book provides a rigorous yet informal treatment of graph theory with an emphasis on computational aspects of graph theory and graph-theoretic algorithms. Numerous applications to actual engineering problems are incorporated with software design and optimization topics.

A First Course in Graph Theory and Combinatorics

Springer The concept of a graph is fundamental in mathematics since it conveniently encodes diverse relations and facilitates combinatorial analysis of many complicated counting problems. In this book, the authors have traced the origins of graph theory from its humble beginnings of recreational mathematics to its modern setting for modeling communication networks as is evidenced by the World Wide Web graph used by many Internet search engines. This book is an introduction to graph theory and combinatorial analysis. It is based on courses given by the second author at Queen's University at Kingston, Ontario, Canada between 2002 and 2008. The courses were aimed at students in their final year of their undergraduate program.

Modeling and Simulation of Logistics Flows 3

Discrete and Continuous Flows in 2D/3D

John Wiley & Sons 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.

Optimization Tools for Logistics

Elsevier Optimization Tools for Logistics covers the theory and practice of the main principles of operational research and the ways it can be applied to logistics and decision support with regards to common software. The book is supported by worked problems and examples from industrial case studies, providing a comprehensive tool for readers from a variety of industries. Covers simple explanations of the mathematical theories related to logistics Contains many problems and examples from industrial case studies Includes coverage of the use of readily available software; spreadsheets, project managers, flows simulators

Topics in Chromatic Graph Theory

Cambridge University Press Chromatic graph theory is a thriving area that uses various ideas of 'colouring' (of vertices, edges, and so on) to explore aspects of graph theory. It has links with other areas of mathematics, including topology, algebra and geometry, and is increasingly used in such areas as computer networks, where colouring algorithms form an important feature. While other books cover portions of the material, no other title has such a wide scope as this one, in which acknowledged international experts in the field provide a broad survey of the subject. All fifteen chapters have been carefully edited, with uniform notation and terminology applied throughout. Bjarne Toft (Odense, Denmark), widely recognized for his substantial contributions to the area, acted as academic consultant. The book serves as a valuable reference for researchers and graduate students in graph theory and combinatorics and as a useful introduction to the topic for mathematicians in related fields.

Graph Representation Learning

Springer Nature Graph-structured data is ubiquitous throughout the natural and social sciences, from telecommunication networks to quantum chemistry. Building relational inductive biases into deep learning architectures is crucial for creating systems that can learn, reason, and generalize from this kind of data. Recent years have seen a surge in research on graph representation learning, including techniques for deep graph embeddings, generalizations of convolutional neural networks to graph-structured data, and neural message-passing approaches inspired by belief propagation. These advances in graph representation learning have led to new state-of-the-art results in numerous domains, including chemical synthesis, 3D vision, recommender systems, question answering, and social network analysis. This book provides a synthesis and overview of graph representation learning. It begins with a discussion of the goals of graph representation learning as well as key methodological foundations in graph theory and network analysis. Following this, the book introduces and reviews methods for learning node embeddings, including random-walk-based methods and applications to knowledge graphs. It then provides a technical synthesis and introduction to the highly successful graph neural network

(GNN) formalism, which has become a dominant and fast-growing paradigm for deep learning with graph data. The book concludes with a synthesis of recent advancements in deep generative models for graphs—a nascent but quickly growing subset of graph representation learning.

Analyzing Network Data in Biology and Medicine

An Interdisciplinary Textbook for Biological, Medical and Computational Scientists

Cambridge University Press Introduces biological concepts and biotechnologies producing the data, graph and network theory, cluster analysis and machine learning, using real-world biological and medical examples.

Integrated Science in Digital Age

ICIS 2019

Springer This book gathers selected papers presented at the 2019 International Conference on Integrated Science in Digital Age (ICIS 2019), which was jointly supported by the Institute of Certified Specialists (ICS), Russia and Springer and held in Batumi, Georgia on May 10-12, 2019. The ICIS 2019 received roughly 50 contributions, by authors hailing from six countries. Following a peer-review process, the Scientific Committee - a multidisciplinary group of 110 experts from 38 countries around the globe - selected roughly 60% for publication. The main topics covered include: Artificial Intelligence Research; Digital Business & Finance; Educational Sciences; Health Management Informatics; Public Administration in the Digital Age; and Social Problem-solving.

Graphs and Matrices

Springer This new edition illustrates the power of linear algebra in the study of graphs. The emphasis on matrix techniques is greater than in other texts on algebraic graph theory. Important matrices associated with graphs (for example, incidence, adjacency and Laplacian matrices) are treated in detail. Presenting a useful overview of selected topics in algebraic graph theory, early chapters of the text focus on regular graphs, algebraic connectivity, the distance matrix of a tree, and its generalized version for arbitrary graphs, known as the resistance matrix. Coverage of later topics include Laplacian eigenvalues of threshold graphs, the

positive definite completion problem and matrix games based on a graph. Such an extensive coverage of the subject area provides a welcome prompt for further exploration. The inclusion of exercises enables practical learning throughout the book. In the new edition, a new chapter is added on the line graph of a tree, while some results in Chapter 6 on Perron-Frobenius theory are reorganized. Whilst this book will be invaluable to students and researchers in graph theory and combinatorial matrix theory, it will also benefit readers in the sciences and engineering.

Topics in Algorithmic Graph Theory

Cambridge University Press Algorithmic graph theory has been expanding at an extremely rapid rate since the middle of the twentieth century, in parallel with the growth of computer science and the accompanying utilization of computers, where efficient algorithms have been a prime goal. This book presents material on developments on graph algorithms and related concepts that will be of value to both mathematicians and computer scientists, at a level suitable for graduate students, researchers and instructors. The fifteen expository chapters, written by acknowledged international experts on their subjects, focus on the application of algorithms to solve particular problems. All chapters were carefully edited to enhance readability and standardize the chapter structure as well as the terminology and notation. The editors provide basic background material in graph theory, and a chapter written by the book's Academic Consultant, Martin Charles Golumbic (University of Haifa, Israel), provides background material on algorithms as connected with graph theory.

Graph Theory Applications

Springer Science & Business Media The first part of this text covers the main graph theoretic topics: connectivity, trees, traversability, planarity, colouring, covering, matching, digraphs, networks, matrices of a graph, graph theoretic algorithms, and matroids. These concepts are then applied in the second part to problems in engineering, operations research, and science as well as to an interesting set of miscellaneous problems, thus illustrating their broad applicability. Every effort has been made to present applications that use not merely the notation and terminology of graph theory, but also its actual mathematical results. Some of the applications, such as in molecular evolution, facilities layout, and traffic network design, have never appeared before in book form. Written at an advanced undergraduate to beginning graduate level, this book is suitable for students of mathematics, engineering, operations research, computer science, and physical sciences as well as for researchers and practitioners with an interest in graph theoretic modelling.

Topics in Topological Graph Theory

Cambridge University Press The use of topological ideas to explore various aspects of graph theory, and vice versa, is a fruitful area of research. There are links with

other areas of mathematics, such as design theory and geometry, and increasingly with such areas as computer networks where symmetry is an important feature. Other books cover portions of the material here, but there are no other books with such a wide scope. This book contains fifteen expository chapters written by acknowledged international experts in the field. Their well-written contributions have been carefully edited to enhance readability and to standardize the chapter structure, terminology and notation throughout the book. To help the reader, there is an extensive introductory chapter that covers the basic background material in graph theory and the topology of surfaces. Each chapter concludes with an extensive list of references.

Graphs

Theory and Algorithms

John Wiley & Sons This adaptation of an earlier work by the authors is a graduate text and professional reference on the fundamentals of graph theory. It covers the theory of graphs, its applications to computer networks and the theory of graph algorithms. Also includes exercises and an updated bibliography.

Graphentheorie

Springer-Verlag, Heidelberg Professionelle elektronische Ausgabe erhältlich direkt bei <http://diestel-graph-theory.com/german/Profi.html> Detailliert und klar, sowie stets mit Blick auf das Wesentliche, führt dieses Buch in die Graphentheorie ein. Zu jedem Themenkomplex stellt es sorgfältig die Grundlagen dar und beweist dann ein oder zwei tiefere typische Sätze, oftmals ergänzt durch eine informelle Diskussion ihrer tragenden Ideen. Es vermittelt so exemplarisch die wichtigsten Methoden der heutigen Graphentheorie, einschließlich moderner Techniken wie Regularitätslemma, Zufallsgraphen, Baumzerlegungen und Minoren. Aus den Besprechungen: "Eine hervorragende und mit größter Sorgfalt geschriebene Einführung in die moderne Graphentheorie, die sich in den Kanon der prägenden Lehrbücher einreihen wird. Vorbehaltlos zu empfehlen." *DMV-Jahresbericht* "Ein Höhepunkt ist das Kapitel zur Minorentheorie von Robertson und Seymour: mit Abstand die beste in der Literatur zu findende Darstellung." *Mathematika* „Das Buch wurde enthusiastisch aufgenommen – und hat es allemal verdient. Eine meisterhaft klare Darlegung der modernen Graphentheorie." *ICA Bulletin* "Fantastisch gelungen ... ein verdammt gutes Buch." *MAA Reviews* "Tief, klar, wunderbar. Ein anspruchsvolles Buch aus dem Herzen der Graphentheorie, voll von Tiefe und Integrität." *SIAM Review*

Graph Theory with Applications

London : Macmillan Press

Handbook of Research on Advanced Applications of Graph Theory in Modern Society

IGI Global In the world of mathematics and computer science, technological advancements are constantly being researched and applied to ongoing issues. Setbacks in social networking, engineering, and automation are themes that affect everyday life, and researchers have been looking for new techniques in which to solve these challenges. Graph theory is a widely studied topic that is now being applied to real-life problems. The *Handbook of Research on Advanced Applications of Graph Theory in Modern Society* is an essential reference source that discusses recent developments on graph theory, as well as its representation in social networks, artificial neural networks, and many complex networks. The book aims to study results that are useful in the fields of robotics and machine learning and will examine different engineering issues that are closely related to fuzzy graph theory. Featuring research on topics such as artificial neural systems and robotics, this book is ideally designed for mathematicians, research scholars, practitioners, professionals, engineers, and students seeking an innovative overview of graphic theory.

Combinatorics and Graph Theory

Springer Science & Business Media These notes were first used in an introductory course team taught by the authors at Appalachian State University to advanced undergraduates and beginning graduates. The text was written with four pedagogical goals in mind: offer a variety of topics in one course, get to the main themes and tools as efficiently as possible, show the relationships between the different topics, and include recent results to convince students that mathematics is a living discipline.

An Introduction to Graph Theory

Graph Theory, Coding Theory and Block Designs

Cambridge University Press These are notes deriving from lecture courses on the theory of t -designs and graph theory given by the authors in 1973 at Westfield College, London.

Automata, Languages and Programming

35th International Colloquium, ICALP 2008 Reykjavik, Iceland, July 7-11, 2008 Proceedings

Springer Science & Business Media ICALP 2008, the 35th edition of the International Colloquium on Automata, Languages and Programming, was held in Reykjavik, Iceland, July 7-11, 2008. ICALP is a series of annual conferences of the European Association for Theoretical Computer Science (EATCS) which first took place in 1972. This year, the ICALP program consisted of the established Track A (focusing on algorithms, automata, complexity and games) and Track B (focusing on logic, semantics and theory of programming), and of the recently introduced Track C (focusing on security and cryptography foundations). In response to the call for papers, the Program Committees received 477 submissions, the highest ever: 269 for Track A, 122 for Track B and 86 for Track C. Out of these, 126 papers were selected for inclusion in the scientific program: 70 papers for Track A, 32 for Track B and 24 for Track C. The selection was made by the Program Committees based on originality, quality, and relevance to theoretical computer science. The quality of the manuscripts was very high indeed, and many deserving papers could not be selected. ICALP 2008 consisted of five invited lectures and the contributed papers.

Graph Theory Applications

Springer Science & Business Media The first part of this text covers the main graph theoretic topics: connectivity, trees, traversability, planarity, colouring, covering, matching, digraphs, networks, matrices of a graph, graph theoretic algorithms, and matroids. These concepts are then applied in the second part to problems in engineering, operations research, and science as well as to an interesting set of miscellaneous problems, thus illustrating their broad applicability. Every effort has been made to present applications that use not merely the notation and terminology of graph theory, but also its actual mathematical results. Some of the applications, such as in molecular evolution, facilities layout, and traffic network design, have never appeared before in book form. Written at an advanced undergraduate to beginning graduate level, this book is suitable for students of mathematics, engineering, operations research, computer science, and physical sciences as well as for researchers and practitioners with an interest in graph theoretic modelling.

Networks, Crowds, and Markets

Reasoning About a Highly Connected World

Cambridge University Press Are all film stars linked to Kevin Bacon? Why do the stock markets rise and fall sharply on the strength of a vague rumour? How does gossip spread so quickly? Are we all related through six degrees of separation? There is a growing awareness of the complex networks that pervade modern society. We see them in the rapid growth of the Internet, the ease of global communication, the swift spread of news and information, and in the way epidemics and financial crises develop with startling speed and intensity. This introductory book on the new science of networks takes an interdisciplinary approach, using economics, sociology, computing, information science and applied mathematics to address fundamental questions about the links that connect us, and the ways that our decisions can have consequences for others.

Topology and Quantum Theory in Interaction

American Mathematical Soc. This volume contains the proceedings of the NSF-CBMS Regional Conference on Topological and Geometric Methods in QFT, held from July 31–August 4, 2017, at Montana State University in Bozeman, Montana. In recent decades, there has been a movement to axiomatize quantum field theory into a mathematical structure. In a different direction, one can ask to test these axiom systems against physics. Can they be used to rederive known facts about quantum theories or, better yet, be the framework in which to solve open problems? Recently, Freed and Hopkins have provided a solution to a classification problem in condensed matter theory, which is ultimately based on the field theory axioms of Graeme Segal. Papers contained in this volume amplify various aspects of the Freed–Hopkins program, develop some category theory, which lies behind the cobordism hypothesis, the major structure theorem for topological field theories, and relate to Costello's approach to perturbative quantum field theory. Two papers on the latter use this framework to recover fundamental results about some physical theories: two-dimensional sigma-models and the bosonic string. Perhaps it is surprising that such sparse axiom systems encode enough structure to prove important results in physics. These successes can be taken as encouragement that the axiom systems are at least on the right track toward articulating what a quantum field theory is.

Graphs and Algorithms in Communication Networks Studies in Broadband, Optical, Wireless and Ad Hoc Networks

Springer Science & Business Media Algorithmic discrete mathematics plays a key role in the development of information and communication technologies, and methods that arise in computer science, mathematics and operations research – in particular in algorithms, computational complexity, distributed computing and optimization – are vital to modern services such as mobile telephony, online banking and VoIP. This book examines communication networking from a mathematical viewpoint. The contributing authors took part in the European COST action 293 – a four-year program of multidisciplinary research on this subject. In this book they offer introductory overviews and state-of-the-art assessments of current and future research in the fields of broadband, optical, wireless and ad hoc networks. Particular topics of interest are design, optimization, robustness and energy consumption. The book will be of interest to graduate students, researchers and practitioners in the areas of networking, theoretical computer science, operations research, distributed computing and mathematics.

Handbook of Graph Theory

CRC Press The Handbook of Graph Theory is the most comprehensive single-source guide to graph theory ever published. Best-selling authors Jonathan Gross and Jay Yellen assembled an outstanding team of experts to contribute overviews of more than 50 of the most significant topics in graph theory-including those related to algorithmic and optimization approach

Analytic Trends in Mathematical Physics

American Mathematical Soc. This volume contains the proceedings of the Arizona School of Analysis and Mathematical Physics, held from March 5–9, 2018, at the University of Arizona, Tucson, Arizona. A main goal of this school was to introduce graduate students and postdocs to exciting topics of current research that are both influenced by physical intuition and require the use of cutting-edge mathematics. The articles in this volume reflect recent progress and innovative techniques developed within mathematical physics. Two works investigate spectral gaps of quantum spin systems. Specifically, Abdul-Rahman, Lemm, Lucia, Nachtergaele, and

Young consider decorated AKLT models, and Lemm demonstrates a finite-size criterion for D -dimensional models. Bachmann, De Roeck, and Fraas summarize a recent proof of the adiabatic theorem, while Bachmann, Bols, De Roeck, and Fraas discuss linear response for interacting Hall insulators. Models on general graphs are the topic of the articles by Fischbacher, on higher spin XXZ, and by Latushkin and Sukhtaiev, on an index theorem for Schrödinger operators. Probabilistic applications are the focus of the articles by DeMuse and Yin, on exponential random graphs, by Saenz, on KPZ universality, and by Stolz, on disordered quantum spin chains. In all, the diversity represented here is a testament to the enthusiasm this rich field of mathematical physics generates.

Graph-Theoretic Concepts in Computer Science

36th International Workshop, WG 2010, Zarós, Crete, Greece, June 28-30, 2010, Revised Papers

Springer The 36th International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2010) took place in Zarós, Crete, Greece, June 28-30, 2010. About 60 mathematicians and computer scientists from all over the world (Australia, Canada, Czech Republic, France, Germany, Greece, Hungary, Israel, Japan, The Netherlands, Norway, Poland, Switzerland, the UK, and the USA) attended the conference. WG has a long tradition. Since 1975, WG has taken place 21 times in Germany, four times in The Netherlands, twice in Austria, twice in France and once in the Czech Republic, Greece, Italy, Norway, Slovakia, Switzerland, and the UK. WG aims at merging theory and practice by demonstrating how concepts from graph theory can be applied to various areas in computer science, or by extracting new graph theoretic problems from applications. The goal is to present emerging research results and to identify and explore directions of future research. The conference is well-balanced with respect to established researchers and young scientists. There were 94 submissions, two of which were withdrawn before entering the review process. Each submission was carefully reviewed by at least 3, and on average 4.5, members of the Program Committee. The Committee accepted 28 papers, which makes an acceptance ratio of around 30%. I should stress that, due to the high competition and the limited schedule, there were papers that were not accepted while they deserved to be.

Random Graph Dynamics

Cambridge University Press The theory of random graphs began in the late 1950s in several papers by Erdos and Renyi. In the late twentieth century, the notion of six

degrees of separation, meaning that any two people on the planet can be connected by a short chain of people who know each other, inspired Strogatz and Watts to define the small world random graph in which each site is connected to k close neighbors, but also has long-range connections. At a similar time, it was observed in human social and sexual networks and on the Internet that the number of neighbors of an individual or computer has a power law distribution. This inspired Barabasi and Albert to define the preferential attachment model, which has these properties. These two papers have led to an explosion of research. The purpose of this book is to use a wide variety of mathematical argument to obtain insights into the properties of these graphs. A unique feature is the interest in the dynamics of process taking place on the graph in addition to their geometric properties, such as connectedness and diameter.

The Petersen Graph

Cambridge University Press The authors examine various areas of graph theory, using the prominent role of the Petersen graph as a unifying feature.

A Textbook of Graph Theory

Springer Science & Business Media In its second edition, expanded with new chapters on domination in graphs and on the spectral properties of graphs, this book offers a solid background in the basics of graph theory. Introduces such topics as Dirac's theorem on k -connected graphs and more.

Research Trends in Graph Theory and Applications

Springer Nature The Workshop for Women in Graph Theory and Applications was held at the Institute for Mathematics and Its Applications (University of Minnesota, Minneapolis) on August 19-23, 2019. During this five-day workshop, 42 participants performed collaborative research, in six teams, each focused on open problems in different areas of graph theory and its applications. The research work of each team was led by two experts in the corresponding area, who prior to the workshop, carefully selected relevant and meaningful open problems that would yield high-quality research and results of strong impact. As a result, all six teams have made significant contributions to several open problems in their respective areas. The workshop led to the creation of the Women in Graph Theory and Applications Research Network, which provided the framework to continue collaborating and to produce this volume. This book contains six chapters, each of them on one of the different areas of research at the Workshop for Women in Graph Theory and Applications, and written by participants of each team.

A Beginner's Guide to Graph Theory

Springer Science & Business Media Concisely written, gentle introduction to graph theory suitable as a textbook or for self-study Graph-theoretic applications from diverse fields (computer science, engineering, chemistry, management science) 2nd ed. includes new chapters on labeling and communications networks and small worlds, as well as expanded beginner's material Many additional changes, improvements, and corrections resulting from classroom use

Basic Graph Theory

Springer This undergraduate textbook provides an introduction to graph theory, which has numerous applications in modeling problems in science and technology, and has become a vital component to computer science, computer science and engineering, and mathematics curricula of universities all over the world. The author follows a methodical and easy to understand approach. Beginning with the historical background, motivation and applications of graph theory, the author first explains basic graph theoretic terminologies. From this firm foundation, the author goes on to present paths, cycles, connectivity, trees, matchings, coverings, planar graphs, graph coloring and digraphs as well as some special classes of graphs together with some research topics for advanced study. Filled with exercises and illustrations, *Basic Graph Theory* is a valuable resource for any undergraduate student to understand and gain confidence in graph theory and its applications to scientific research, algorithms and problem solving.

Social Media in Politics

Case Studies on the Political Power of Social Media

Springer This volume sets out to analyse the relation between social media and politics by investigating the power of the internet and more specifically social media, in the political and social discourse. The volume collects original research on the use of social media in political campaigns, electoral marketing, riots and social revolutions, presenting a range of case studies from across the world as well as theoretical and methodological contributions. Examples that explore the use of social media in electoral campaigns include, for instance, studies on the use of Face book in the 2012 US presidential campaign and in the 2011 Turkish general elections. The final section of the book debates the usage of Twitter and other Web 2.0 tools in mobilizing people for riots and revolutions, presenting and analysing recent events in Istanbul and Egypt, among others.

Topics in Structural Graph Theory

Cambridge University Press The rapidly expanding area of structural graph theory uses ideas of connectivity to explore various aspects of graph theory and vice versa. It has links with other areas of mathematics, such as design theory and is increasingly used in such areas as computer networks where connectivity algorithms are an important feature. Although other books cover parts of this material, none has a similarly wide scope. Ortrud R. Oellermann (Winnipeg), internationally recognised for her substantial contributions to structural graph theory, acted as academic consultant for this volume, helping shape its coverage of key topics. The result is a collection of thirteen expository chapters, each written by acknowledged experts. These contributions have been carefully edited to enhance readability and to standardise the chapter structure, terminology and notation throughout. An introductory chapter details the background material in graph theory and network flows and each chapter concludes with an extensive list of references.

Mobile Web and Intelligent Information Systems

13th International Conference, MobiWIS 2016, Vienna, Austria, August 22-24, 2016, Proceedings

Springer This book constitutes the refereed proceedings of the 13th International Conference on Mobile Web and Intelligent Information Systems, MobiWIS 2016, held in Vienna, Austria, in August 2016. The 36 papers presented in this volume were carefully reviewed and selected from 98 submissions. They were organization in topical sections named: mobile Web - practice and experience; advanced Web and mobile systems; security of mobile applications; mobile and wireless networking; mobile applications and wearable devices; mobile Web and applications; personalization and social networks.