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Recent developments in the fields of intelligent computing and communication have paved the way for the handling of current and upcoming problems and brought about significant technological advancements. This book presents the proceedings of IConIC 2021, the 4th International Conference on Intelligent Computing, held on 26 and 27 March 2021 in Chennai, India. The principle objective of the annual IConIC conference is to provide an international scientific forum where participants can exchange innovative ideas in relevant fields and interact in depth through discussion with their peer group. The theme of the 2021 conference and this book is 'Smart Intelligent Computing and Communication Technology', and the 109 papers included here focus on the technological innovations and trendsetting initiatives in medicine, industry, education and security that are improving and optimizing business and technical processes and enabling inclusive growth. The papers are grouped under 2 headings: Evolution of Computing Intelligence; and Computing and Communication, and cover a broad range of intelligent-computing research and applications. The book provides an overview of the cutting-edge developments and emerging areas of study in the technological fields of intelligent computing, and will be of interest to

researchers and practitioners from both academia and industry.

The book presents eight well-known and often used algorithms besides nine newly developed algorithms by the first author and his students in a practical implementation framework. Matlab codes and some benchmark structural optimization problems are provided. The aim is to provide an efficient context for experienced researchers or readers not familiar with theory, applications and computational developments of the considered metaheuristics. The information will also be of interest to readers interested in application of metaheuristics for hard optimization, comparing conceptually different metaheuristics and designing new metaheuristics.

This second edition of the highly acclaimed and successful first edition, deals primarily with the analysis of structural engineering systems, with applicable methods to other types of structures. The concepts presented in the book are not only relevant to skeletal structures but can equally be used for the analysis of other systems such as hydraulic and electrical networks. The book has been substantially revised to include recent developments and applications of the algebraic graph theory and matroids.

This book discusses the application of metaheuristic algorithms in a number of important optimization problems in civil engineering. Advances in civil

engineering technologies require greater accuracy, efficiency and speed in terms of the analysis and design of the corresponding systems. As such, it is not surprising that novel methods have been developed for the optimal design of real-world systems and models with complex configurations and large numbers of elements. This book is intended for scientists, engineers and students wishing to explore the potential of newly developed metaheuristics in practical problems. It presents concepts that are not only applicable to civil engineering problems, but can also be used for optimizing problems related to mechanical, electrical, and industrial engineering. It is an essential resource for civil, mechanical and electrical engineers who use optimization methods for design, as well as for students and researchers interested in structural optimization.

India Gaming Industry Law and Regulations Handbook

This book critically develops and discusses Iran's geopolitical imaginations and explores its various foreign-policy schools of thought and their controversies. In doing so, the book covers Iran's foreign policy and international relations from "9/11" all the way to Rouhani's rise (late 2014). Accounting for both domestic and the international balance of power, the book theorizes the post-unipolar world order of the 2000s, dubbed "imperial interolarity", examines Iran's relations with non-Western great-powers in that era, and offers a critique of the

“Rouhani doctrine” and its economic and foreign-policy visions. Forged in the fires and intense deliberations of a PhD, undertaken at a most unique institution of higher learning in the world, Ali Fathollah-Nejad has produced one of the most informative and evocative studies of Iran’s foreign policy and international relations to date. Framed in a highly original theoretical approach, Ali’s nuanced analysis, drawing on a lorry load of primary and secondary sources, details the process and context of policy in the Islamic Republic, thus producing an unrivalled and lasting account of modern Iran’s worldview and the behaviour of this revolutionary state in a fast-changing world. —Anoush Ehteshami, Professor of International Relations & Director of the Institute for Middle Eastern and Islamic Studies, School of Government and International Affairs, Durham University (UK) Empirically rich and theoretically sophisticated, *Iran in an Emerging New World Order* flashes out the key drivers behind Iran’s international relations since the mid-2000s. Providing evidence for the material and geopolitical significance of Iran’s identity constructions, the book enriches the debate on the Islamic Republic’s foreign policy and bridges the divide between the discipline of IR and area studies. —Fawaz A. Gerges, Professor of International Relations & inaugural Director, LSE Middle East Centre (2010–13), London School of Economics and Political Science (LSE); author of the

forthcoming *The 100 Years' War for Control of the Middle East* (Princeton University Press, 2021). Ali Fathollah-Nejad has established himself as one of the most insightful observers of Iranian politics. Providing the analytical background to his assessments of Tehran's foreign policy in the 21st century, this book comes out opportunely at a time when a new U.S. administration is about to re-engage with Iran. —Gilbert Achcar, Professor of Development Studies and International Relations, SOAS (School of Oriental and African Studies) University of London A decisive contribution to two avant-gardist fields of knowledge: Critical geopolitics and Iranian foreign relations. Anyone interested in cutting-edge research that brings together International Relations and Iranian Studies will revel in this important book. —Arshin Adib-Moghaddam, Professor in Global Thought and Comparative Philosophies, Department of Politics and International Studies & former Chair (2012–18), Centre for Iranian Studies, SOAS University of London One of the few to have a thorough, beyond-the-headlines and forward-looking grasp of Iran, Ali Fathollah-Nejad offers a brilliant analysis of what is in store for Iran. A must-read for anybody interested in geopolitics. —Florence Gaub, Deputy Director & Director of Research, European Union Institute for Security Studies (EUISS), Paris It is no longer possible to think of any nation-state without simultaneously seeing the reflection of an entire changing

world in it. Ali Fathollah-Nejad's prose and politics in Iran in an Emerging New World Order is the state-of-the-art mapping of the epistemic shift that seeks to understand the global in the local, and the domestic in the foreign. The result is a mode of supple and symbiotic thinking that reveals the way transnational politics dwells on the borderline where the fate of nations unravels into the fold of a dysfunctional disorder that has become the fact of our fragile world. —Hamid Dabashi, Hagop Kevorkian Professor of Iranian Studies and Comparative Literature, Columbia University Iranian politics, outside of a small group of specialists, remains poorly understood. Iran in an Emerging New World Order helps demystify this subject. Thoroughly researched, very accessible and packed with insights, this book, focusing on the Ahmadinejad period, is highly recommended. It makes an important contribution to the study of internal Iranian politics, Iran's foreign policy orientation and the international relations of the Middle East. —Nader Hashemi, Director, Center for Middle East Studies & Associate Professor, Josef Korbel School of International Studies, University of Denver Ali Fathollah-Nejad has produced an academic work that is, from my viewpoint, so far the most comprehensive one concerning Iranian standing in regional and international politics, its new political élite and their attitude towards the West and the world order. —Farhad Khosrokhavar, Professor in the Sociology

of Contemporary Iran & Director of Studies at EHESS (École des hautes études en sciences sociales), the School for Advanced Studies in the Social Sciences, France Since its inception in 1979, the Islamic Republic's initial foreign policy was based on the rejection of the bipolar international order under the banner of a "neither East nor West" policy. By the end of the Cold War and the emergence of a unipolar order, the Islamic Republic tried to adjust its approach to deal with the United States as a hegemonic power. Iran shifted its foreign policy toward the East as soon as the international order moved from unipolarity in the early 2000s. Why did Iran turn its foreign policy, and what were the consequences and ramifications of this shift? Iran in an Emerging New World Order dives deep to answer these questions. Iran in an Emerging New World Order is a comprehensive and critical review of Iran's foreign policy in post-unipolar world. As a delightful read full of important information and analyses, the book explores the domestic, regional, and international dimensions and ideational and material factors that shape and impact the Islamic Republic's geopolitical imaginations and foreign policy controversies. Fathollah-Nejad explores Iran's foreign-policy transformation from a unipolar to a (what he cautions as an increasingly but not fully-fledged) multipolar order, and its relations with non-Western great-powers in the 21st century. Written with clarity, Iran in an Emerging New World Order is a

must-read primer for anyone interested in Iranian politics in particular and Middle East politics in general. —Saeid Golkar, Assistant Professor, Department of Political Science, University of Tennessee, Chattanooga; Senior Fellow on Iran Policy, Chicago Council on Global Affairs & author, *Captive Society: The Basij Militia and Social Control in Post-Revolutionary Iran* (Columbia University Press, 2015) A competent, engaged and impressive study of Iran's foreign policy and its place in the world. Ali Fathollah-Nejad's most important quality is that he looks with a wide lens and sees not just Iranian politics and foreign policy (in which he is clearly an expert) but the dynamics of the broader world and changes in the international system. This book is thus a must-read for those interested in Iranian foreign policy but also in shifts and changes of the international system into the second decade of the 21st century. —Arash Azizi (New York University), author of *The Shadow Commander: Soleimani, the US, and Iran's Global Ambitions* (Oneworld Publications, 2020) In presenting Iran as sets of complexities – within and how it acts externally; how it represents itself and is represented by others; its myriad political and religious cultures, and how these shape the state and its international relations – and locating those within a constantly-changing global environment, Fathollah-Nejad provides us with unique and alternative assessments of how Iran's foreign policy is shaped within the

context of what he calls “Imperial Interpolarity”. The creative interplay of these various factors makes this an indispensable text for anyone wishing to understand Iran and its international relations within the current global political environment. —Na’eem Jeenah, Executive Director, Afro–Middle East Centre (AMEC), Johannesburg & advisory board member, World Congress for Middle Eastern Studies (WOCMES) A magnificent and conceptually powerful book; an eye opener for those who essentialize the role of Iran in contemporary International Relations. This landmark study covers the complexity of Iran’s cultural geopolitics and the diversity of its interlocutors in 21st-century world politics. The book is useful for delving into the internal dynamics of Iranian politics and its connection with the spheres of power in international relations. It is a very methodical book. Theoretically flawless. A deep, brilliant and enlightening academic text. —Moisés Garduño García, Professor in the Center for International Relations, National Autonomous University of Mexico (UNAM) In this book, Ali Fathollah-Nejad goes beyond the usual one-dimensional view that dominates the study of Iran’s foreign policy and presents a comprehensive framework explaining the interrelated role of socio-cultural, economic and geopolitical elements in shaping the Islamic Republic’s foreign-policy orientation. The book also focuses on a crucial period involving two critical transitions: a systemic

transition from the unipolar to the post-unipolar world order and a domestic one from a hardline to a more moderate worldview. All this makes the book a valuable contribution to the field. —Hamidreza Azizi, Alexander von Humboldt Fellow, Middle East and Africa Research Division, German Institute for International and Security Affairs (SWP) & former Assistant Professor of Regional Studies, Shahid Beheshti University, Tehran (2016-20) *Iran in an Emerging New World Order* provides a timely and original account of foreign-policy making in the Islamic Republic of Iran, especially the turbulent first decade of the new millennium. —Kamran Matin, Senior Lecturer in International Relations, Sussex University & Associate Research Fellow, Swedish Institute of International Affairs (UI) Ali Fathollah-Nejad's *Iran in an Emerging New World Order* builds on a reliable scientific approach and an informed overview of Iranian foreign policy. It identifies and examines the different factors which orientate it, such as its various schools of thought and their debates, the élites' role, the interplay between structure and culture, and the one between internal and external realms. Furthermore, it casts light on the evolution of Tehran's choices, including its "look to the East". In this new book, Fathollah-Nejad has provided a challenging study which demonstrates the need to go beyond conventional framings, to include political culture, and provides a new evaluation of Iran's international relations. This is an original and

significant contribution to the literature on international relations, the workings of the Islamic Republic, and the understanding of the latter's regional and global actions. —Firouzeh Nahavandi, Professor of Sociology of Development and Political Science & Director, Institute of Sociology & Director, CECID (Center for International Cooperation and Development Studies), Université libre de Bruxelles (ULB), as well as President, Graduate School of Development Studies of French Community of Belgium Through its careful analysis of a modern political culture in Iran gestated in the context of an encounter with European colonial modernity and evolved in correspondence with a catalogue of internal and external others, Ali Fathollah-Nejad's timely book places contemporary geopolitical concerns against a much-needed backdrop of colonial and anti-colonial histories. —Siavash Saffari, Associate Professor of West Asian Studies, Department of Asian Languages and Civilizations, Seoul National University If you really want to dive deep into Iran and understand the reasons why its leaders are operating in the current crisis, this is the book you should read. It teaches analysts and policy-makers to understand the past to act wisely in the future. —Susanne Koelbl, award-winning Foreign Correspondent, Der Spiegel ICICS-2020 is the third conference initiated by the School of Electronics and Electrical Engineering at Lovely Professional University that explored recent

innovations of researchers working for the development of smart and green technologies in the fields of Energy, Electronics, Communications, Computers, and Control. ICICS provides innovators to identify new opportunities for the social and economic benefits of society. This conference bridges the gap between academics and R&D institutions, social visionaries, and experts from all strata of society to present their ongoing research activities and foster research relations between them. It provides opportunities for the exchange of new ideas, applications, and experiences in the field of smart technologies and finding global partners for future collaboration. The ICICS-2020 was conducted in two broad categories, Intelligent Circuits & Intelligent Systems and Emerging Technologies in Electrical Engineering.

This book presents and applies a novel efficient meta-heuristic optimization algorithm called Colliding Bodies Optimization (CBO) for various optimization problems. The first part of the book introduces the concepts and methods involved, while the second is devoted to the applications. Though optimal design of structures is the main topic, two chapters on optimal analysis and applications in constructional management are also included. This algorithm is based on one-dimensional collisions between bodies, with each agent solution being considered as an object or body with mass. After a collision of two moving bodies with specified masses and velocities, these bodies again

separate, with new velocities. This collision causes the agents to move toward better positions in the search space. The main algorithm (CBO) is internally parameter independent, setting it apart from previously developed meta-heuristics. This algorithm is enhanced (ECBO) for more efficient applications in the optimal design of structures. The algorithms are implemented in standard computer programming languages (MATLAB and C++) and two main codes are provided for ease of use.

Defining Iran presents a new and revealing analysis of the way in which Iranian political discourses compete with each other by examining them within the framework of national identity construction. By deconstructing the intellectual roots and development of Iranian national identity, Shabnam Holliday advocates the need to study Iran's heritage and historical experience to understand key shifts and processes in contemporary Iranian politics. Holliday convincingly argues that competing discourses of national identity advocated by political figures from Musaddiq to the current administration demonstrate a politics of resistance to both internal and external forces. With a particular emphasis on Khatami's presidency, this study compares the meanings attached by significant members of the Iranian political elite to concepts including Iran's pre-Islamic heritage, Islamic heritage, civilization, 'democracy' and the 'West'. Furthermore, discourses of Iranian national identity exist not in isolation but rather as part of a continuous process construction and reconstruction in Iran's journey of political development; a process manifested so vividly in the revolution of 1979 and

the fallout from the 2009 presidential election. Defining Iran simultaneously furthers our understanding of the conceptualization of national identity both generally and specifically in the case of Iran and political dynamics which shape contemporary Iran. Shi'ism caught the attention of the world as Iran experienced her revolution in 1979 and was subsequently cast in the mold of a monolithic discourse of radical political Islam. The spokespersons of Shi'i Islam, in or out of power, have not been the sole representatives of the faith. Nonconformist and uncompromising, the Shi'i jurist and reformist Shari'at Sangelaji (1891-1944) challenged certain popular Shi'i beliefs and the mainstream clerical establishment, guarding and propagating it. In *Shi'i Reformation in Iran*, Ali Rahnema offers a fresh understanding of Sangelaji's reformist discourse from a theological standpoint, and takes readers into the heart of the key religious debates in Iran in the 1940s. Exploring Sangelaji's life, theological position and disputations, Rahnema demonstrates that far from being change resistant, debates around why and how to reform the faith have long been at the heart of Shi'i Islam. Drawing on the writings and sermons of Sangelaji, as well as interviews with his son, the book provides a detailed and comprehensive introduction to the reformist's ideas. As such it offers scholars of religion and Middle Eastern politics alike a penetrating insight into the impact that these ideas have had on Shi'ism - an impact which is still felt today.

An imposing roster of internationally renowned Iranian scholars and rising young

Iranian academics offer essays on the nature and evolution of Iran's economy, significant aspects of Iran's changing society, and the dynamics of its domestic and international politics since the 1979 revolution, focusing on the post-Khomeini period. Ahmad Fardid (1910–94), the 'anti-Western' philosopher known to many as the Iranian Heidegger, became the self-proclaimed philosophical spokesperson for the Islamic Republic, famously coining the term 'Westoxification'. Using new materials about Fardid's intellectual biography and interviews with thirteen individuals, Ali Mirsepassi pieces together the striking story of Fardid's life and intellectual legacy. Each interview in turn sheds light on Iran's twentieth-century intellectual and political self-construction and highlights Fardid's important role and influence in the creation of Iranian modernity. The Fardid phenomenon was unique to the Iranian story, and yet contributed to a broader twentieth-century Heideggerian tradition that marked the political destiny of other countries under a similar ideological sway. Through these accounts, Mirsepassi cuts to the nerve of how deadly political 'authenticity movements' take hold of modern societies and spread their ideology. Combining a sociological framework with the realities of lived experience, he examines Iran's recent and astonishing upheavals, experiments, and mass mobilizations.

While much has been written about the impact of the 1979 Islamic revolution on life in Iran, discussions about the everyday life of Iranian women have been glaringly missing. *Women in Place* offers a gripping inquiry into gender segregation policies and women's

rights in contemporary Iran. Author Nazanin Shahrokni takes us onto gender-segregated buses, inside a women-only park, and outside the closed doors of stadiums where women are banned from attending men's soccer matches. The Islamic character of the state, she demonstrates, has had to coexist, fuse, and compete with technocratic imperatives, pragmatic considerations regarding the viability of the state, international influences, and global trends. Through a retelling of the past four decades of state policy regulating gender boundaries, *Women in Place* challenges notions of the Iranian state as overly unitary, ideological, and isolated from social forces and pushes us to contemplate the changing place of women in a social order shaped by capitalism, state-sanctioned Islamism, and debates about women's rights. Shahrokni throws into sharp relief the ways in which the state strives to constantly regulate and contain women's bodies and movements within the boundaries of the "proper" but simultaneously invests in and claims credit for their expanded access to public spaces. This text combines concepts of graph theory and matrix algebra to present powerful tools for the analysis of large-scale structures. In this third edition, Kaveh (Iran University of Science and Technology, Tehran) develops approaches for the analysis of large-scale systems, and provides new material on vector spaces associated with graphs, algorithm

While most books examine only the classical aspects of hydrology, this three-volume set covers multiple aspects of hydrology, and includes contributions from experts from

more than 30 countries. It examines new approaches, addresses growing concerns about hydrological and ecological connectivity, new quantitative and qualitative managing techniques

The achievements and biographical details of nearly 1,500 key researchers and practitioners in the fields of computational mechanics, applied mathematics, computer science, artificial intelligence, aerospace, aeronautical, chemical, civil, environmental, mechanical, and structural engineering are included in this directory.

Both Iran and Pakistan represent two distinct patterns of political systems and navigating their relationship is a very difficult task indeed. However, new developments between them in recent years have created salutary interest among scholars of international relations to focus on their long term relationship. This book focuses on various facets of this relationship in a long term perspective by analyzing them under various phases. The period from 1947 to 2010 has been chosen to analyse this relationship, particularly from an Iranian angle, in the context of different ruling systems such as monarchy and theocracy so as to understand the overall state pattern of Iranian foreign policy. The book traces the Iranian independence in a modern state system, the entire gamut of Iranian foreign policy towards Pakistan followed under a monarchical system, an analysis of the relationship of the Islamic Republic of Iran with Pakistan from 1979 to 1989, an in-depth study that covers the period from 1990 till the current regime to understand the tone and tenor of a modified theocratic foreign policy

pursued under various Iranian Presidents and its approach towards Pakistan and finally leading on to a total assessment of the relationship between the two states with some fresh and prognostic thoughts.

Optimal Structural Analysis John Wiley & Sons

By highlighting the complex set of factors and their interactions that have shaped Arab-Iranian relations, the book hopes to be a corrective to the simplistic and reductionist interpretations of these relations.

This book presents efficient metaheuristic algorithms for optimal design of structures. Many of these algorithms are developed by the author and his colleagues, consisting of Democratic Particle Swarm Optimization, Charged System Search, Magnetic Charged System Search, Field of Forces Optimization, Dolphin Echolocation Optimization, Colliding Bodies Optimization, Ray Optimization. These are presented together with algorithms which were developed by other authors and have been successfully applied to various optimization problems. These consist of Particle Swarm Optimization, Big Bang-Big Crunch Algorithm, Cuckoo Search Optimization, Imperialist Competitive Algorithm, and Chaos Embedded Metaheuristic Algorithms. Finally a multi-objective optimization method is presented to solve large-scale structural problems based on the Charged System Search algorithm. The concepts and algorithms presented in this book are not only applicable to optimization of skeletal structures and finite element models, but can equally be utilized for optimal design of other systems such as hydraulic and

electrical networks. In the second edition seven new chapters are added consisting of the new developments in the field of optimization. These chapters consist of the Enhanced Colliding Bodies Optimization, Global Sensitivity Analysis, Tug of War Optimization, Water Evaporation Optimization, Vibrating Particle System Optimization and Cyclical Parthenogenesis Optimization algorithms. A chapter is also devoted to optimal design of large scale structures.

From popular and 'New Wave' pre-revolutionary films of Fereydoon Goleh and Abbas Kiarostami to post-revolutionary films of Mohsen Makhmalbaf, the Iranian cinema has produced a range of films and directors that have garnered international fame and earned a global following. Golbarg Rekabtalaei takes a unique look at Iranian cosmopolitanism and how it transformed in the Iranian imagination through the cinematic lens. By examining the development of Iranian cinema from the early twentieth century to the revolution, Rekabtalaei locates discussions of modernity in Iranian cinema as rooted within local experiences, rather than being primarily concerned with Western ideals or industrialisation. Her research further illustrates how the ethnic, linguistic, and religious diversity of Iran's citizenry shaped a heterogeneous culture and a cosmopolitan cinema that was part and parcel of Iran's experience of modernity. In turn, this cosmopolitanism fed into an assertion of sovereignty and national identity in a modernising Iran in the decades leading up to the revolution. Iran's interaction with its neighbours is a topic of wide interest. But while many

historical studies of the country concentrate purely on political events and high-profile actors, this book takes the opposite approach: writing history from below, it instead focuses on the role of everyday lives. Modern Iranian historiography has been dominated by ideas of nationalism, modernization, religion, autocracy, revolution and war. *Iran in the Middle East* adds new dimensions to the study of four crucial areas of Iranian history: the events and impact of the Constitutional Revolution, Iran's transnational connections, the social history of Iran and developments in historiography.

Lists for 19 include the Mathematical Association of America, and 1955- also the Society for Industrial and Applied Mathematics.

The definitive translation by Dick Davis of the great national epic of Iran—now newly revised and expanded to be the most complete English-language edition A Penguin Classic Dick Davis—“our pre-eminent translator from the Persian” (The Washington Post)—has revised and expanded his acclaimed translation of Ferdowsi’s masterpiece, adding more than 100 pages of newly translated text. Davis’s elegant combination of prose and verse allows the poetry of the *Shahnameh* to sing its own tales directly, interspersed sparingly with clearly marked explanations to ease along modern readers. Originally composed for the Samanid princes of Khorasan in the tenth century, the *Shahnameh* is among the

greatest works of world literature. This prodigious narrative tells the story of pre-Islamic Persia, from the mythical creation of the world and the dawn of Persian civilization through the seventh-century Arab conquest. The stories of the Shahnameh are deeply embedded in Persian culture and beyond, as attested by their appearance in such works as *The Kite Runner* and the love poems of Rumi and Hafez. For more than sixty-five years, Penguin has been the leading publisher of classic literature in the English-speaking world. With more than 1,500 titles, Penguin Classics represents a global bookshelf of the best works throughout history and across genres and disciplines. Readers trust the series to provide authoritative texts enhanced by introductions and notes by distinguished scholars and contemporary authors, as well as up-to-date translations by award-winning translators.

This book examines the unintended consequences of top-down reforms in Iran, analysing how the Iranian reformist governments (1997–2005) sought to utilise gradual reforms to control independent activism, and how citizens responded to such a disciplinary action. While the governments successfully ‘set the field’ of permitted political participation, part of the civil society that took shape was unexpectedly independent. Despite being a minority, independent activists were not marginal: without them, in fact, the Green Movement of 2009 would not have

taken shape. Building on in-depth empirical analysis, the author explains how autonomous activism forms and survives in a semi-authoritarian country. The book contributes to the debate about the implications of elite-led reforms for social reproduction, offering an innovative interpretation and an original analysis of social movements from a political science perspective.

This volume includes over 30 chapters, written by experts from around the world. It examines numerous management strategies for dealing with drought and scarcity. These strategies include management approaches for different regions, such as coastal, urban, rural, and agricultural areas. It offers multiple strategies for monitoring, assessing, and forecasting drought through the use of remote sensing and GIS tools. It also presents drought mitigation management strategies, such as groundwater management, rainwater harvesting, conservations practices, and more.

Mirsepasi uses interviews with thirteen individuals to relate the colourful life and times of Ahmad Fardid and his intellectual legacy.

Studying intellectual trends in Iran in a global historical context, this new intellectual history challenges many dominant paradigms in Iranian historiography and offers a new revisionist interpretation of Iranian modernity.

This book focuses on the theory and application of power switching components

in power networks. More specifically, it discusses current interruption theory, applied stresses to switching components in power networks and appropriate methods to test their different functionalities. It reviews the basic working principles of current technologies and summarizes the upcoming technological advances within the field of power switching devices. Taking an educational approach to the subject, this book is useful for graduate courses on high voltage equipment and power device technology within the electric power engineering discipline. Furthermore, inclusion of numerous worked examples, exercises and easily digestible descriptions of complex physical phenomena in switching devices make this an invaluable self-learning resource for engineers.

Recent developments in soft-computation techniques have paved the way for handling huge volumes of data, thereby bringing about significant changes and technological advancements. This book presents the proceedings of the 3rd International Conference on Emerging Current Trends in Computing & Expert Technology (COMET 2020), held at Panimalar Engineering College, Chennai, India on 6 and 7 March 2020. The aim of the book is to disseminate cutting-edge developments taking place in the technological fields of intelligent systems and computer technology, thereby assisting researchers and practitioners from both institutions and industry to upgrade their knowledge of the latest developments

and emerging areas of study. It focuses on technological innovations and trendsetting initiatives to improve business values, optimize business processes and enable inclusive growth for corporates, industries and education alike. The book is divided into two sections; 'Next Generation Soft Computing' is a platform for scientists, researchers, practitioners and academics to present and discuss their most recent innovations, trends and concerns, as well as the practical challenges encountered in the field. The second section, 'Evolutionary Networking and Communications' focuses on various aspects of 5G communications systems and networking, including cloud and virtualization solutions, management technologies, and vertical application areas. It brings together the latest technologies from all over the world, and also provides an excellent international forum for the sharing of knowledge and results from theory, methodology and applications in networking and communications. The book will be of interest to all those working in the fields of intelligent systems and computer technology.

India is not a great power yet, but it has the potential to emerge as one. That is why, United States pays closer attention to India's role in the regional balance. The strategic significance of the nuclear deal, signed between India and the US, can be appreciated only in the context of the changing US geopolitical strategy

and the evolving US-India relationship. This book addresses the wide-ranging issues concerning the Indo-US Nuclear Deal. Making a critical assessment of India's energy policy, it describes in detail the agreement with IAEA, NSG waiver, the political fallouts of the deal, its implications for South Asia, and the China factor. The texts of the agreement, the Hyde Act, and India-IAEA Safeguards Agreements have also been appended.

Optimal analysis is defined as an analysis that creates and uses sparse, well-structured and well-conditioned matrices. The focus is on efficient methods for eigensolution of matrices involved in static, dynamic and stability analyses of symmetric and regular structures, or those general structures containing such components. Powerful tools are also developed for configuration processing, which is an important issue in the analysis and design of space structures and finite element models. Different mathematical concepts are combined to make the optimal analysis of structures feasible. Canonical forms from matrix algebra, product graphs from graph theory and symmetry groups from group theory are some of the concepts involved in the variety of efficient methods and algorithms presented. The algorithms elucidated in this book enable analysts to handle large-scale structural systems by lowering their computational cost, thus fulfilling the requirement for faster analysis and design of future complex systems. The value

of the presented methods becomes all the more evident in cases where the analysis needs to be repeated hundreds or even thousands of times, as for the optimal design of structures by different metaheuristic algorithms. The book is of interest to anyone engaged in computer-aided analysis and design and software developers in this field. Though the methods are demonstrated mainly through skeletal structures, continuum models have also been added to show the generality of the methods. The concepts presented are not only applicable to different types of structures but can also be used for the analysis of other systems such as hydraulic and electrical networks.

This book presents the most recent innovative studies in the field of water resources for arid areas to move towards more sustainable management of the resources. It gathers outstanding contributions presented at the 2nd International Water Conference on Water Resources in Arid Areas (IWC), which was held online (Muscat, Oman) in November 2020. Papers discuss challenges and solutions to alleviate water resource scarcity in arid areas, including water resources management, the introduction of modern irrigation systems, natural groundwater recharge, construction of dams for artificial recharge, use of treated wastewater, and desalination technologies. As such, the book provides a platform for the exchange of recent advances in water resources research, which

are essential to improving the critical water situation and to move towards more sustainable management of water resources.

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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.

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