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With the recent shift of chemical fertilizers and pesticides to organic agriculture, the employment of microbes that perform significant beneficial functions for plants has been highlighted. This book presents timely discussion and coverage on the use of microbial formulations, which range from powdered or charcoal-based to solution and secondary metabolite-based bioformulations. Bioformulation development of biofertilizers and biopesticides coupled with the advantages of nanobiotechnology propose significant applications in the agricultural section including nanobiosensors, nanoherbicides, and smart transport systems for the regulated release of agrochemical. Moreover, the formulation of secondary metabolites against individual phytopathogens could be used irrespective of geographical positions with higher disease incidences. The prospective advantages and uses of nanobiotechnology generate tremendous interest, as it could augment production of agricultural produce while being cost-effective both energetically and economically. This bioformulation approach is incomparable to existing technology, as the bioformulation would explicitly target the particular pathogen without harming the natural microbiome of the ecosystem. Nanobiotechnology in Bioformulations covers the constraints associated with large-scale development and commercialization of bioinoculant formations. Furthermore, exclusive emphasis is placed on next-generation efficient bioinoculants having secondary metabolite formulations with longer shelf life and advanced competence against several phytopathogens. Valuable chapters deal with bioformulation strategies that use divergent groups of the microbiome and include detailed diagrammatic and pictorial representation. This book will be highly beneficial for both experts and novices in the fields of microbial bioformulation, nanotechnology, and nano-microbiotechnology. It discusses the prevailing status and applications available for microbial researchers and scientists, agronomists, students, environmentalists, agriculturists, and agribusiness professionals, as well as to anyone devoted to sustaining the ecosystem. Prize-winning journalist and the co-author of smash New York Times bestseller *I Am Malala*, Christina Lamb, now tells the inspiring true story of another remarkable young hero: Nujeen Mustafa, a teenager born with cerebral palsy, whose harrowing journey from war-ravaged Syria to Germany in a wheelchair is a breathtaking tale of fortitude, grit, and hope that lends a face to the greatest humanitarian issue of our time, the Syrian refugee crisis. For millions around the globe, sixteen-year-old Nujeen Mustafa embodies the best of the human spirit. Confined to a wheelchair because of her cerebral palsy and denied formal schooling in Syria because of her illness, Nujeen taught herself English by watching American soap operas. When her small town became the epicenter of the brutal fight between ISIS militants and US-backed Kurdish troops in 2014, she and her family were forced to flee. Despite her physical limitations, Nujeen embarked on the arduous trek to safety and a new life. The grueling sixteen-month odyssey by foot, boat, and bus took her across Turkey and the Mediterranean to Greece, through Macedonia to Serbia and Hungary, and finally, to Germany. Yet, in spite of the tremendous physical hardship she endured, Nujeen's extraordinary optimism never wavered. Refusing to give in to despair or see herself as a passive victim, she kept her head high. As she told a BBC reporter, "You should fight to get

what you want in this world." Nujeen's positivity and resolve infuses this unforgettable story of one young woman determined to make a better life for herself. Told by acclaimed British foreign correspondent Christina Lamb, Nujeen is a unique and powerful memoir that gives voice to the Syrian refugee crisis, helping us to understand that the world must change—and offering the inspiration to make that change reality. When the British dismantled their Raj in 1947 India, as the 'successor' state, inherited the colonial unitary central apparatus whereas Pakistan, as the 'seceding' state, had no semblance of a central government. In *The State of Martial Rule* Ayesha Jalal analyses the dialectic between state construction and political processes in Pakistan in the first decade of the country's independence and convincingly demonstrates how the imperatives of the international system in the 'cold war' era combined with regional and domestic factors to mould the structure of the Pakistani state. The study concludes by placing the state and political developments in Pakistan since 1958 within a conceptual framework. It will be read by historians of South Asia and by students and specialists of comparative politics and political economy.

This masterpiece in English literature by eminent scholar and recognised authority on Islam, Dr Muhammad Tahir-ul-Qadri is a study of the permissibility and legality of celebrating the birth of the Prophet Muhammad (Mawlid al-Nabi) who was sent as a Mercy to humanity.

The book comprehensively discusses the mechanisms of pathogenesis and drug resistance; current diagnostics landscape of four key human pathogens; bacterial, fungal, protozoans and viral which are the causes of major infectious diseases. It also assesses the emerging technologies for the detection and quantification of these pathogens. Further, it discusses the novel opportunities to fight against these infectious diseases and to identify pertinent drug targets with novel methodologies. It also reviews the current and future insights into the control, elimination, and eradication of these infectious diseases. Importantly, the book discusses the epidemiological characteristics and various challenges in combating Ebola and Influenza diseases. Finally, the book highlights the growing role of nanotechnology and bioinformatics resources for combating the infectious diseases. In summary, the book provides the mechanistic insight of the pathogenicity, drug-resistance, therapeutic strategies and identification of the novel drug targets of Mycobacterium tuberculosis, Plasmodium, Candida, Hepatitis C and emerging viral infections.

Stroke is a major cause of death and the major cause of adult neurological disability in most of the world. Despite its importance on a population basis, research into the genetics of stroke has lagged behind that of many other disorders. However, the situation is now changing. An increasing number of single gene disorders causing stroke are being described, and there is growing evidence that polygenic factors are important in the risk of apparently "sporadic" stroke. *Stroke Genetics* provides an up-to-date review of the area, suitable for clinicians treating stroke patients, and both clinical and non-clinical researchers in the field of cerebrovascular disease. The full range of monogenic stroke disorders causing cerebrovascular disease, including ischaemic stroke, intracerebral haemorrhage, aneurysms and arteriovenous malformations, are covered. For each, clinical features, diagnosis, and genetics are described. Increasing evidence suggest that genetic factors are also important for the much more common multifactorial stroke; this evidence is reviewed along with the

results of genetic studies in this area. Optimal and novel strategies for investigating multifactorial stroke, including the use of intermediate phenotypes such as intima-media thickness and MRI detected small vessel disease are reviewed. The book concludes by describing a practical approach to investigating patients with stroke for underlying genetic disorders. Also included is a list of useful websites.

A spud fulfills his destiny as a supermarket superhero in this delightfully wacky picture book from the creators of Norman the Slug with a Silly Shell! Meet Supertato! He's the supermarket superhero with eyes everywhere—always on the lookout for danger. When the veggie aisle is thrown into turmoil by an evil pea, Supertato heroically springs into action! But this very, very evil pea won't go back to the frozen section without a fight. Will justice prevail, or has Supertato finally met his match?

The eight-volume set comprising LNCS volumes 9905-9912 constitutes the refereed proceedings of the 14th European Conference on Computer Vision, ECCV 2016, held in Amsterdam, The Netherlands, in October 2016. The 415 revised papers presented were carefully reviewed and selected from 1480 submissions. The papers cover all aspects of computer vision and pattern recognition such as 3D computer vision; computational photography, sensing and display; face and gesture; low-level vision and image processing; motion and tracking; optimization methods; physics-based vision, photometry and shape-from-X; recognition: detection, categorization, indexing, matching; segmentation, grouping and shape representation; statistical methods and learning; video: events, activities and surveillance; applications. They are organized in topical sections on detection, recognition and retrieval; scene understanding; optimization; image and video processing; learning; action, activity and tracking; 3D; and 9 poster sessions.

Born in a Karachi slum, Sharif Barkati became obsessed with "American" ideas of love and freedom at a very young age. He began to dream of a public place in the city that did not follow the rules, where people would be free to say and do whatever they wanted under open skies, away from the conservative eyes of Pakistani society. With the help of his friend Afzal - and TJ, an extremely wealthy Pakistani-American - Sharif was able to realize his dream in the form of a colossal compound on the Karachi coast, full of bars, cafes, clubs, and the people of Karachi strolling about, hand in hand. They called it Little America. Now in prison, Sharif tells the story of his life in a letter to his favorite novelist, hoping that he will turn it into a literary masterpiece. At once a rollicking journey around the mind of a man desperate to be free, an allegory of the neocolonial endeavour, and an investigation of the desire to emulate the perceived superior while desperately trying to hold on to one's own cultural identity, Little America asks the question: What, really, is freedom, and what can be sacrificed in its name?

The nation sinks deep into mourning as news of former Prime Minister Rani Shah's assassination arrives. Intelligence agencies, opposition leaders, the army top brass, her closest relatives - all seem to be shifting in their chairs even as special investigative teams gear up to file a report. Conspiracy theories abound for there were many who stood to gain if she pulled out of the imminent elections. The needle of suspicion points most immediately to Madam Shah's close confidante Nazneen Khan, who was seen sitting right beside her in the convoy and, oddly, escaped the bomb blast unscathed. Sabyn Javeri's tale of intense friendship between two ambitious women unfolds in a country steeped in fanaticism and patriarchy. Set against a backdrop of intrigue and political machinations, this is a novel about love, loyalty, obsession and deception. Nobody Killed Her is dark noir meets pacy courtroom drama. An electrifying debut you will rave about to everyone you meet.

Islam Between East and West - Islamic and Western philosophies examined, by the first president of Bosnia. In comparing the offerings of secular civilization with the truths and justice of Islam, the author analyzes the West's denial of Islam and the lack of progress among Muslims. An inspiring and astonishingly integrated analysis of the human condition. The seep

of its power gives an invigorating sense of the beauty and universality of Islam. Referrals for Islam Between East and West An inspiring and astonishingly integrated analysis of the human condition. The sweep of its power gives an invigorating sense of the beauty and universality of Islam. Robin Woodsworth Carlsen For centuries Europe has benefitted from Islam, often without acknowledging it and without giving anything in return. Now with the publication of Islam Between East and West, Europe has begun to pay its debt to Islam. Rational and yet not insulting to the emotions, it exalts the spirit without denigrating the body. But what stands it apart as a landmark is its transcendental wisdom expressed in a style inherent to all noble ideas. Doubtless, its appeal will go beyond its time because it embraces life - and there is no theme greater than life. M . Tariq

Bestselling and critically acclaimed, Lahore-based Mirza Athar Baig is one of the most important contemporary Urdu writers. Hassan's State of Affairs - his first book to be translated into English - is a surreal ride through Pakistan. It follows an accountant, Hassan, and a group of filmmakers, Masquerade Productions, who are working on Pakistan's first surrealist film, titled This Film Cannot Be Made. As the film's production runs into hurdles, escalating from the comic to the horrific, the text itself explodes into multiple storylines, genres and characters, and bends language and form - the result is an entirely new kind of novel. Brilliantly translated by Haider Shahbaz, this audacious, highly experimental, yet hugely entertaining book is a fitting introduction to one of the most exciting writers working in any language today.

Simple, loving, heart touching, filled with emotions and feelings poetry book "Handbook of Religion and the Asian City highlights the creative and innovative role of urban aspirations in Asian world cities. It points out that urban politics and governance are often about religious boundaries and processions--in short, that public religion is politics. The essays show how projects of secularism come up against projects and ambitions of a religious nature, a particular form of contestation that takes the city as its public arena. Asian cities are sites of speculation, not only for those who invest in real estate but also for those who look for housing, for employment, and for salvation. In its potential and actual mobility, the sacred creates social space in which they all can meet. Handbook of Religion and the Asian City makes the comparative case that one cannot study the historical patterns of urbanization in Asia without paying attention to the role of religion in urban aspirations"--Provided by publisher.

Awais Reza is a shopkeeper in Lahore's Anarkali Bazaar—the largest open market in South Asia—whose labyrinthine streets teem with shoppers, rickshaws, and cacophonous music. But Anarkali's exuberant hubbub cannot conceal the fact that Pakistan is a country at the edge of a precipice. In recent years, the easy sociability that had once made up this vibrant community has been replaced with doubt and fear. Old-timers like Awais, who inherited his shop from his father and hopes one day to pass it on to his son, are being shouldered aside by easy money, discount stores, heroin peddlers, and the tyranny of fundamentalists. Every night before Awais goes to bed, he plugs in his cell phone and hopes. He hopes that the city will not be plunged into a blackout, that the night will remain calm, that the following morning will bring affluent and happy customers to his shop and, most of all, that his three sons will safely return home. Each of the boys, though, has a very different vision of their, and Pakistan's, future. The

Bargain from the Bazaar—the product of eight years of field research—is an intimate window onto ordinary middle-class lives caught in the maelstrom of a nation falling to pieces. It's an absolutely compelling portrait of a family at risk—from a violently changing world on the outside and a growing terror from within.

A gentle introduction to genetic algorithms. Genetic algorithms revisited: mathematical foundations. Computer implementation of a genetic algorithm. Some applications of genetic algorithms. Advanced operators and techniques in genetic search. Introduction to genetics-based machine learning. Applications of genetics-based machine learning. A look back, a glance ahead. A review of combinatorics and elementary probability. Pascal with random number generation for fortran, basic, and cobol programmers. A simple genetic algorithm (SGA) in pascal. A simple classifier system(SCS) in pascal. Partition coefficient transforms for problem-coding analysis.

The nation of Pakistan was born out of the trauma of Partition from India in 1947. Its cricket team evolved in the chaotic aftermath. Initially unrecognised, underfunded and weak, Pakistan's team grew to become a major force in world cricket. Since the early days of the Raj, cricket has been entwined with national identity and Pakistan's successes helped to define its status in the world. Defiant in defence, irresistible in attack, players such as A.H.Kardar, Fazal Mahmood, Wasim Akram and Imran Khan awed their contemporaries and inspired their successors. The story of Pakistan cricket is filled with triumph and tragedy. In recent years, it has been threatened by the same problems affecting Pakistan itself: fallout from the 'war on terror', sectarian violence, corruption, crises in health and education, and a shortage of effective leaders. For twenty years, Pakistan cricket has been stained by the scandalous behaviour of the players involved in match-fixing. Since 2009, the fear of violence has driven Pakistan's international cricket into exile. No one knows when it will return home. But Peter Osborne's narrative is also full of hope. For all its troubles, cricket gives all Pakistanis a chance to excel and express themselves, a sense of identity and a cause for pride in their country. Packed with first-hand recollections, and digging deep into political, social and cultural history, Wounded Tiger is a major study of sport and nationhood.

Explores how the rapid rise of such nations as China, India, and Brazil is countering America's previous dominance over the global economy, geopolitics, and culture, and shares advice on how the United States can thrive in the face of international changes.

The newspaper has a history; but it has, likewise, a natural history. The press, as it exists, is not, as our moralists sometimes seem to assume, the willful product of any little group of living men. On the contrary, it is the outcome of an historic process in which many individuals participated without foreseeing what the ultimate product of their labors was to be. The newspaper, like the modern city, is not wholly a rational product. No one sought to make it just what it is. In spite of all the efforts of individual

men and generations of men to control it and to make it something after their own heart, it has continued to grow and change in its own incalculable ways. The type of newspaper that exists is the type that has survived under the conditions of modern life. The men who may be said to have made the modern newspaper—James Gordon Bennett, Charles A. Dana, Joseph Pulitzer, and William Randolph Hearst—are the men who discovered the kind of paper that men and women would read and had the courage to publish it. The natural history of the press is a history of a surviving species. It is one of the most characteristic fruits of enlightenment, due to the extension of the opportunities of education to the masses of the population. The modern newspaper is a product of city life; it is no longer merely an organ of propaganda and opinion, but a form of popular literature. The journal of opinion was largely a business man's newspaper. The so-called independent press added to its public the so-called artisan class. The yellow press was created mainly to capture immigrants, and women. It was this increase of circulation that made the newspaper—formerly a subsidized organ of the parties an independent business enterprise, an envelope and carrier for advertising. This Policy Research Report on The Internationalization of Crime, Conflict, and Violence offers a unified framework to take stock of the theoretical and empirical literature on crime, conflict, and violence and discuss the how the international community organizes itself to address security as a regional and global public good. Traditionally, scientific fields have defined boundaries, and scientists work on research problems within those boundaries. However, from time to time those boundaries get shifted or blurred to evolve new fields. For instance, the original goal of computer vision was to understand a single image of a scene, by identifying objects, their structure, and spatial arrangements. This has been referred to as image understanding. Recently, computer vision has gradually been making the transition away from understanding single images to analyzing image sequences, or video understanding. Video understanding deals with understanding of video sequences, e. g. , recognition of gestures, activities, facial expressions, etc. The main shift in the classic paradigm has been from the recognition of static objects in the scene to motion-based recognition of actions and events. Video understanding has overlapping research problems with other fields, therefore blurring the fixed boundaries. Computer graphics, image processing, and video databases have obvious overlap with computer vision. The main goal of computer graphics is to generate and animate realistic looking images, and videos. Researchers in computer graphics are increasingly employing techniques from computer vision to generate the synthetic imagery. A good example of this is image-based rendering and modeling techniques, in which geometry, appearance, and lighting is derived from real images using computer vision techniques. Here the shift is from synthesis to analysis followed by synthesis.

Begomoviruses are one of the most interesting plant viruses to study for basic and applied research as they cause huge economic losses to agriculture industries and farmers all over the world. They belong to family Geminiviridae and are emergent plant viral pathogens which cause diseases in various crops in the tropical and subtropical regions. They are transmitted by the whitefly (*B. tabaci*) and have either one (monopartite DNA-A) or two (bipartite DNA-A and DNA-B) genomic components. DNA-A and DNA-B are of ~2600 - 2800 nucleotides each. A number of serious diseases of cultivated crops of the Fabaceae, Malvaceae, Solanaceae and Cucurbitaceae families

are caused by Begomoviruses which are considered as threat to their cultivation in many countries. Accurate diagnosis is important for successful diseases management, since plants infected by Begomovirus do not recover, suffer serious yield losses and act as further sources of inoculum, which is then picked up and spread by their vector whitefly (*B. tabaci*). Reports of occurrence of new viruses and re-emergence of several known viruses in new niches have become regular event. In such a dynamic system, growth of several crop species relies on an accurate diagnosis, management and better understanding of the biology of the casual virus. This is crucial to evolve appropriate control practices and to prevent the virus infection. Researchers have achieved considerable progress in characterization, detection and management of virus on different crop species in the last decade. This book covers latest information in diagnosis of begomoviruses in the present scenario and explores the new vistas in the field of genomics and proteomics. Chapters in Section 1 illustrates the occurrence, genome organisation, transmission and diagnostics of begomoviruses. It also details the diseases caused by begomoviruses on different crops, detection techniques and management strategies in support of research findings by presentation of data, graphics, figures and tables. Section 2 is a chapterwise collection of occurrence, diversity and status of begomoviruses in Asian Africa counties where the diseases are most prevalent. This book will provide wide opportunity to the readers to have complete information and status of begomovirus in Asia and Africa. This will be useful resource for researchers and extension workers involved in the begomvirus disease diagnosis and molecular biology. Expert detection, accurate diagnosis and timely management play a significant role in keeping plants free from pathogens. In this book expert researchers share their research knowledge and literature which are vital towards the diagnosis of begomoviruses, addressing traditional plant pathology techniques as well as advanced molecular diagnostic approach. The book deals with the economically important crops including fruits, vegetables along with challenges in crop protection against diseases caused by begomovirus. This will be resourceful and handy for researcher, practitioners and also students.

Chronicle of political history of Pakistan; memoirs of a prominent Pakistani politician from 1964-1988.

The Battle for Pakistan showcases a marriage of convenience between unequal partners. The relationship between Pakistan and the United States since the early 1950s has been nothing less than a whiplash-inducing rollercoaster ride. Today, surrounded by hostile neighbors, with Afghanistan increasingly under Indian influence, Pakistan does not wish to break ties with the United States. Nor does it want to become a vassal of China and get caught in the vice of a US-China rivalry, or in the Arab-Iran conflict. Internally, massive economic and demographic challenges as well as the existential threat of armed militancy pose huge obstacles to Pakistan's development and growth. Could its short-run political miscalculations in the Obama years prove too costly? Can the erratic Trump administration help salvage this relationship? Based on detailed interviews with key US and South Asian leaders, access to secret documents and operations, and the author's personal relationships and deep knowledge of the region, this book untangles the complex web of the US-Pakistani relationship and identifies a clear path forward, showing how the United States can build better partnerships in troubled corners of the world.

The four-volume set comprising LNCS volumes 5302/5303/5304/5305 constitutes the refereed proceedings of the 10th European Conference on Computer Vision, ECCV 2008, held in Marseille, France, in October 2008. The 243 revised papers presented were carefully reviewed and selected from a total of 871 papers submitted. The four books cover the entire range of current issues in computer vision. The papers are organized in topical sections on recognition, stereo, people and face recognition, object tracking, matching, learning and features, MRFs, segmentation, computational photography and active reconstruction.

First and only undergraduate textbook that addresses the social and ethical issues associated with a wide array of emerging technologies, including genetic modification, human enhancement, geoengineering, robotics, virtual reality, artificial meat, neurotechnologies, information technologies, nanotechnology, sex selection, and more.

Afzal Ahmed Syed holds a unique place among contemporary poets of the Urdu language, as an acknowledged master of both the classical and modern Urdu poetic forms. The poems in *Rococo and Other Worlds* explore the mythology and historical realities of South Asia and the Middle East; their bold imagery creates narratives of voluptuous perfection, which remain inseparable from the political realities that Syed witnessed as a young observer of the violent separation of East Pakistan and emergence of Bangladesh in 1971 and of the Lebanese civil war in 1976. Musharraf Ali Farooqi's sensitive translations bring this extraordinary work to English readers for the first time.

Enabling the Business of Agriculture 2019 presents indicators that measure the laws, regulations and bureaucratic processes that affect farmers in 101 countries. The study covers eight thematic areas: supplying seed, registering fertilizer, securing water, registering machinery, sustaining livestock, protecting plant health, trading food and accessing finance. The report highlights global best performers and countries that made the most significant regulatory improvements in support of farmers.

Ninth volume of a 40 volume series on nanoscience and nanotechnology, edited by the renowned scientist Challa S.S.R. Kumar. This handbook gives a comprehensive overview about Nanotechnology Characterization Tools for Tissue Engineering and Medical Therapy. Modern applications and state-of-the-art techniques are covered and make this volume an essential reading for research scientists in academia and industry.

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