Dubai To Use Blockchain Technology For All Government

All of the topics discussed in this book – from sovereignty to cybercrime, and from drones to the identification of passengers & privacy – are profoundly affected by algorithms; so are air traffic services and aeronautical communications. All of these aviation-related aspects are addressed in a 75-year-old treaty called the Chicago Convention and its Annexes, which, as this book argues, needs to be reviewed with a focus on its relevance and applicability in connection with Moore's Law, which posits that transistors in computer microchips double in speed, power and performance every two years, while the cost of computers is halved during the same period. Firstly, in terms of traditional territorial sovereignty, we have arrived at a point where there is a concept of data sovereignty and ownership that raises issues of privacy. Data transmission becomes ambivalent in terms of territorial sovereignty, and the Westphalian model may not be the perfect answer. Whether it be the manufacture of airplanes, the transfer of data on individuals, or the transmission of aeronautical and telecommunications information – all have to be carried out in accordance with the same fundamental principle: duty of care. Against the backdrop of the relevant provisions of the Chicago Convention and its Annexes, the detailed analysis presented here covers key areas such as: megatrends; AI and international law in the digital age; blockchain and aviation; drones; aviation and telecommunications; aviation and the Internet; cybersecurity; and digital identification of passengers & privacy. In turn, the book suggests how we can best manage this transition.

Designed to provide an insight into the Blockchain in depth concept DESCRIPTION Insightful & Conceptual coverage of Internet & Blockchain evolution, Bitcoin, Ethereal, Hyper-ledger, R3 Cora, Auxledger, GDPR, Cybersecurity, Consensus, Mechanisms, Enterprise applications, Global Developments, BAAS platforms, Disruptions across various countries, functional areas along with solution architectures. KEY FEATURES Book provide the in depth and up to date information about the technology. Learn about Blockchain 1.0 to Blockchain 4.0 To Trace and link the DNA of Blockchain paradigm to real world entities. To discuss comprehensively the relation of Blockchain to the cutting edge technologies today To discuss the role of the leading global technology organizations in promoting the blockchain ecosystem Focus on the impact of blockchain technology on the human resources function through a comprehensive case study. Trace the origin of internet to Blockchain of the future & written like a story to make the Blockchain concept well understood in the right perspective and context of digital world's challenges WHAT WILL YOU LEARN Learn about Blockchain 1.0 to Blockchain 4.0 DAOs & ICOs-Facilitating Entrepreneurship Birth of Enterprise Blockchain Malware Attacks and the Cyberthreat. IoT, DMADV, Blockchain as a Service. WHO THIS BOOK IS FOR This book unfolds "Blockchain" in its true essence with no prefixes to it. Right sized for everyone who wants to hit the first mile on Blockchain. This book will surely be a treasure for all those who are eager to know the disruptive impact & possibilities of this amazing paradigm. Table of Contents 1. Introduction- How it started. Rise of Blockchain Religion 2. Whodunnit - Unravelling the Mystery of bitcoin's Origin 3. Blockchain - Some FAQs What is Blockchain? Some fundamentals 4. Its 'Data' Stupid! - The Rising Power of Data Exponents 5. The Rise of Digital Marketing: How it all Started 6. Customer Relationship Management (CRM) 7. Big Data Analytics & its Implications to organisations 8. Machine Learning & Artificial Intelligence: Automating the Future 9. Internet of Things- The booming penetration 10. Malware attacks and the cyberthreats 11. Risks of centralization & single points of failure 12. General Data Protection Regulations and their Implications 13. Blockchain- An introduction 14. Bitcoin & The Blockchain - The inception of the 'BigBang' 15. Key features and benefits of Blockchain 16. Ethereum- The State Machine 17. DAOs & ICOs- Facilitating Entrepreneurship 18. Blockchain Certified LLPs to Boost Entrepreneurship 19. Blockchain Platforms for Web 2.0 Applications 20. The Birth of Enterprise Blockchain 21. Hyperledger Project - Fabric, Sawtooth - Versatile and Empowering 22. Enterprise Blockchain Platforms- A brief look at options 23. DMADV: Lean Six Sigma inspired approach to architect a BCT Solution 24. Scaling up the Blockchain Project 25. Blockchain as a Service- Various platforms available 26. Blockchain Applications in Action- Case study 27. Blockchain use cases- Enterprises, Government, NGOs 28. Blockchainified Future- A Vision for progressive enterprises 29. Maneuvering in the World of GDPR 30. A safer and secure world with Blockchain based solutions 31. Annexure 1: Blockchain Glossary 32. Annexure 2: Big Data Analytics - Applications Across Global Enterprises 33. Annexure 3: Prominent Blockchain Based Applications and DAOs 34. Annexure 4: Consensus Models- A Practical Comparison 35. Annexure 5: Enterprise Blockchain Applications- Top use cases x Blockchain The Untold Story 36. Annexure 6: Corda Key Concepts 37. Annexure 7: Example of a Blockchain Technical White paper 38. Annexure 8: More on 3 Cs of Blockchain-Consensus, CIA & CAP. 39. Annexure 9: Concepts addressed in the book 40. Testimonials

This in-depth book addresses a key void in the literature surrounding the Internet of Things (IoT) and health. By systematically evaluating the benefits of mobile, wireless, and sensor-based IoT technologies when used in health and wellness contexts, the book sheds light on the next frontier for healthcare delivery. These technologies generate data with significant potential to enable superior care delivery, self-empowerment, and wellness management. Collecting valuable insights and recommendations in one accessible volume, chapter authors identify key areas in health and wellness where IoT can be used, highlighting the benefits, barriers, and facilitators of these technologies as well as suggesting areas for improvement in current policy and regulations. Four overarching themes provide a suitable setting to examine the critical insights presented in the 31 chapters: Mobile- and sensor-based solutions Opportunities to incorporate critical aspects of analytics to provide superior insights and thus support better decision-making Critical issues around aspects of IoT in healthcare contexts Applications of portals in healthcare contexts A comprehensive overview that introduces the critical issues regarding the role of IoT technologies for health, Delivering Superior Health and Wellness Management with IoT and Analytics paves the way for scholars, practitioners, students, and other stakeholders to understand how to substantially improve health and wellness management on a global scale.

Blockchain technology has come a long way since the initial vision published by Satoshi Nakamoto in 2008. Big buzz words like "bitcoin," "blockchain," and "cryptocurrency" are everywhere. Companies and governments have started to use blockchain technology in earnest and will increasingly do so for the foreseeable future. This book takes an in-depth look at blockchain technology and how users can take advantage of its potential. Since its initial conception, blockchain has encompassed both a social promise and new technology. Originally proposed as a solution for Bitcoin's cryptocurrency record-keeping system, blockchains are now used to store the records of all types of applications. Core services we all depend on like the transfer of money, voting, land records, IP rights, and identity all rely on intermediaries. Blockchain software has begun taking the place of these antiquated systems. The software becomes the trusted record-keeping system, and the rules programed into the software become the intermediaries. This book explains the fundamentals of blockchain technology and assumes that the reader has

little to no knowledge of the subject. Topics are explained as simply as possible, while not obscuring details that may affect the reader. It also gives the reader insight into the critical differences in blockchain software and will provide them with a basic understanding of how and why these systems work. After reading this book, the reader will be able to speak with confidence on the topic, know key differences in technology. The reader will also have critical insight into blockchain software's inherent limitations and shortcomings. This book is also the definitive guide to the Blockchain Technology Foundation (BTF) exam from EXIN. It will prepare the reader for the test, and each chapter ends with review questions for extra guidance in preparing for the exam.

The convergence of Artificial Intelligence (AI) in blockchain creates one of the world’s most reliable technology-enabled decision-making systems that is virtually tamper-proof and provides solid insights and decisions. The integration of AI and Blockchain affects many aspects from food supply chain logistics and healthcare record sharing to media royalties and financial security. It is imperative that regulatory standards are emphasized in order to support positive outcomes from the integration of AI in blockchain technology. Regulatory Aspects of Artificial Intelligence on Blockchain provides relevant legal and security frameworks and the latest empirical research findings in blockchain and AI. Through the latest research and standards, the book identifies and offers solutions for overcoming legal consequences that pertain to the application of AI into the blockchain system, especially concerning the usage of smart contracts. The chapters, while investigating the legal and security issues associated with these applications, also include topics such as smart contacts, network vulnerability, cryptocurrency, machine learning, and more. This book is essential for technologists, security analysts, legal specialists, privacy and data security practitioners, IT consultants, standardization professionals, researchers, academicians, and students interested in blockchain and AI from a legal and security viewpoint.

This book provides a comprehensive review of industry 4.0 and its applications, discussing the history of industry evaluation, including industry 1.0, 2.0, 3.0 and 4.0, and the future structure of industry evaluation. It also examines the effects and impact of various technologies in industry and presents new interdisciplinary business models based on advanced technologies with the help of use cases. Lastly, it highlights the benefits of technological implementation in industry using examples of real-world applications, providing a robust and reliable technological conceptual framework and roadmap for decision-makers in all areas of industry involved transformation.

The Blockchain revolution has arrived and is here to stay! Remember how fast smart phones evolved and these days if you do not have one you feel you arer missing out? Blockchain technology which fuels cryptocurrency is a revolution at the same level as smart phones once was! Did you know that a $100 investment in a cryptocurrency could have made you over $400,000? This book Blockchain: is an in-depth guide on blockchain technology and cryptocurrency (including bitcoin). You will be amazed what is uncovered in this book! Discover all th?r? ?? to kn?w ?b?ut the Bl??k?h??n revolution! L?k? many, ?? Bitcoin r??? t? ?r?m?n?n??, I decided t? stay ?n th? ??d?l?n??. W?th?n a short t?m?, this ?n? ?r??t??urr?n?? ?l?mb?d in v?lu? t? new highs each ?nd ?v?r? m?nth. I w?uld look at h?w much a ??ngl? Bitcoin w?? tr?d?ng f?r ?nd think t? myself: "I w??h I had ?nv??t?d ??rl??r." Tw? ???r? ago, I d?d ??m? r????r?h ?nd concluded th?t there ?? still money t? be m?d?. T?d?? ?nd ?n th? ???r 2017, I'm ?r?ud t? ??? th?t th?r? ?? ?t?ll a l?t ?f ?r?f?t left on th? t?bl? f?r those that w??h t? ?nt?r th? d?g?t?l ???n?m?. Th? intention of this b??k is t? give ??u a ?umm?r? on th? world of ?r??t??urr?n???? ?nd t? provide ??u with ?ll of th? basic ?nf?rm?t??n th?t ??u n??d to g?t invested ?nd b? able t? ?r?v?d? a better ???n?m?? futur? f?r you ?nd ??ur f?m?l?. W? are th? ?r??????? of a r?v?lut??n in th? w?? th? w?rld tr??t? th? m?n?t?r? policy as a whole. There will b? r???d ?h?ng?? ?n th? ??m?ng ???r?, and you will want t? b? ?n early ?d??t?r ?f what ?? sure to b? a gr??t ??ur?? of ?n??m? for th? few that d???d? to learn ?b?ut th? d?g?t?l ???n?m? ?nd g?t a head ?t?rt. Continue r??d?ng ?nd you will d????v?r th? ???r?t und?rgr?und ???n?m? ?r???ng ?n the f?rm ?f ?r??t??urr?n????. Th? t??hn?l?g? m?ght seem complicated; ?t m?ght appear ?ut ?f ??ur area of expertise, but th? truth ?? th?t this n??h? market ?? n?t th?t difficult t? und?r?t?nd, ?nd with m? explanations ??u w?ll h?v? a ?l??r ???tur? ?f h?w the digital economy works t?d??, h?w to ?r?f?t fr?m ?t, and wh?r? ?t is g??ng ?n th? future. In Th?? B??k Y?u W?ll F?nd: An explanation ?f Bl??k?h??n t??hn?l?g?, d???gn?d f?r b?g?nn?r? ?nd wr?tt?n by ?n ?x??rt T??? and strategies to earn r??l ?n??m? thr?ugh Blockchain b??k?d ?urr?n???? A gu?d? d???gn?d ?r?und th? ??n???t ?f teaching ?th?r? h?w t? r??l?z? profits fr?m cryptocurrencies A l??t ?f th? b??t ?urr?n???? to ?nv??t in, w?th advice about where to ?t?rt ?nd h?w t? m?k? th? gr??t??t ?????bl? ?r?f?t A detailed explanation of h?w t? ?r??t? a m?n?ng r?g, ?l?ng with everything you n??d t? know ?b?ut the hardware ?nd components, ?n?lud?ng th? ???????t?d costs.

The banking and financial landscape has been inundated with technology over the last decade, with FinTech, InsurTech and RegTech being just some of the new applications within finance. In the Gulf Cooperation Council (GCC), FinTech is yet to find its feet despite several digital transformation drives initiated by the regional governments in the UAE and Bahrain. In comparison to conventional finance, the use of FinTech within Islamic financial institutions (IFIs) in GCC countries is still in its very early stages. However, the potential disruption that technology may cause for the Islamic finance sector within this region cannot be underestimated. Aiming to highlight, examine and address key strategic, operational and regulatory issues facing IFIs as they make an effort to keep up with the FinTech revolution, this book explores the market positioning, product structure and placement, delivery channels and customer requirements within the GCC market. The authors evaluate the current situation and look forward to future regulation surrounding technology and financial institutions within the GCC. Scholars and students researching Islamic finance and financial technology will find this book an insightful and valuable read, as well as those interested in international finance more generally.

The aim of this book is to understand the technological and business potential of the blockchain technology and to reflect on its legal challenges, providing an unparalleled critical analysis of the disruptive potential of this technology for the economy and the legal system.

Dubai has continued to meet its targets in becoming the global capital of Islamic finance, nearly doubling the number of sukuk (Islamic bonds) listings on its exchanges since 2017. Furthermore, eased policy restrictions to encourage foreign investment and the 2019 budget’s continued commitment to infrastructure development ahead of Expo 2020 are expected to continue driving economic activity. As one of the most diversified economies in the region, Dubai continues to present growth opportunities in various sectors including tourism, logistics, manufacturing and education. Although the emirate has benefitted from its proximity to oil and gas fields, Dubai is right at the forefront of the emerging cleaner energy world, and developing and promoting renewable technologies, including solar energy and electric vehicles.

This book presents chapters from diverse range of authors on different aspects of how Blockchain and IoT are converging and the impacts of these developments. The book provides an extensive cross-sectional and multi-disciplinary look into this trend and how it affects artificial intelligence, cyber-physical systems, and robotics with a look at applications in aerospace, agriculture, automotive, critical infrastructures, healthcare, manufacturing, retail, smart transport systems, smart cities, and smart healthcare. Cases include the impact of Blockchain for IoT Security; decentralized access control systems in IoT; Blockchain architecture for scalable access management in IoT; smart and sustainable IoT applications incorporating Blockchain, and more. The book presents contributions from international academics, researchers, and practitioners from diverse perspectives. Presents how Blockchain and IoT are converging and the impacts of these developments on technology and its application; Discusses IoT and Blockchain from cross-sectional and multi-disciplinary perspectives; Includes contributions from researchers, academics, and professionals from around the world.

Find out what Blockchain is, how it works, and what it can do for you Blockchain is the technology behind Bitcoin, the revolutionary 'virtual currency' that's changing the way people do business. While Bitcoin has enjoyed some well-deserved hype, Blockchain may be Bitcoin's most vital legacy. Blockchain For Dummies is the ideal starting place for business pros looking to gain a better understanding of what Blockchain is, how it can improve the integrity of their data, and how it can work to fundamentally change their business and enhance their data security. Blockchain For Dummies covers the essential things you need to know about this exciting technology's promise of revolutionizing financial transactions, data security, and information integrity. The book covers the technologies behind Blockchain, introduces a variety of existing Blockchain solutions, and even walks you through creating a small but working Blockchain-based application. Blockchain holds the promise to revolutionize a wide variety of businesses. Get in the know about Blockchain now with Blockchain For Dummies and be ready to make the changes to business that your colleagues and competitors will later wish they'd done. Discover ten ways Blockchain can change business Find out how to apply a Blockchain solution See how to make data more secure Learn how to work with vendors Filled with vital information and tips on how this paradigm-changing technology can transform your business for the better, this book will not only show you Blockchain's full potential, but your own as well!

As we enter the Industrial Revolution 4.0, demands for an increasing degree of trust and privacy protection continue to be voiced. The development of blockchain technology is very important because it can help frictionless and transparent financial transactions and improve the business experience, which in turn has far-reaching effects for economic, psychological, educational and organizational improvements in the way we work, teach, learn and care for ourselves and each other. Blockchain is an eccentric technology, but at the same time, the least understood and most disruptive technology of the day. This book covers the latest technologies of cryptocurrencies and blockchain technology and their applications. This book discusses the blockchain and cryptocurrencies related issues and also explains how to provide the security differently through an algorithm, framework, approaches, techniques and mechanisms. A comprehensive understanding of what blockchain is and how it works, as well as insights into how it will affect the future of your organization and industry as a whole and how to integrate blockchain technology into your business strategy. In addition, the book explores the blockchain and its with other technologies like Internet of Things, big data and artificial intelligence, etc.

This book constitutes the proceedings papers from the 17th European, Mediterranean, and Middle Eastern Conference on Information Systems, EMCIS 2020, held in Dubai, UAE, in November 2020. Due to the COVID-19 pandemic the conference took place virtually. EMCIS focuses on approaches that facilitate the identification of innovative research of significant relevance to the Information Systems discipline following sound research methodologies that lead to results of measurable impact. The 56 papers presented in this volume were carefully reviewed and selected from a total of 161 submissions to the main conference. They are grouped in section on Big Data and Analytics, Blockchain Technology and Applications, Digital Government, Digital Services and Social Media, Emerging Computing Technologies and Trends for Business Process Management, Enterprise Systems, Healthcare Information Systems, Information Systems Security and Information Privacy Protection, Innovative Research Projects, Management and Organisational Issues in Information Systems.

This book constitutes selected papers from the 16th European, Mediterranean, and Middle Eastern Conference, EMCIS 2019, held in Dubai, UAE, in October 2019. EMCIS is dedicated to the definition and establishment of Information Systems as a discipline of high impact for the methodical community and IS professionals, focusing on approaches that facilitate the identification of innovative research of significant relevance to the IS discipline. The 48 full papers presented in this volume were carefully reviewed and selected from a total of 138 submissions. They were organized in topical sections named: Big Data and Analytics; Blockchain Technology and Applications; Cloud Computing; Digital Services and Social Media; e-Government; Enterprise Information Systems; Health-Care Information Systems; Information Systems Security and Information Privacy Protection; Innovative Research Projects; IT Governance; and Management and Organizational Issues in Information Systems.

Introduction to Blockchain TechnologyThe many faces of blockchain technology in the 21st centuryVan Haren

This book is composed of a selection of articles from The 2021 World Conference on Information Systems and Technologies (WorldCIST'21), held online between 30 and 31 of March and 1 and 2 of April 2021 at Hangra de Heroismo, Terceira Island, Azores, Portugal. WorldCIST is a global forum for researchers and practitioners to present and discuss recent results and innovations, current trends, professional experiences and challenges of modern information systems and technologies research, together with their technological development and applications. The main topics covered are: A) Information and Knowledge Management; B) Organizational Models and Information Systems; C) Software and Systems Modeling; D) Software Systems, Architectures, Applications and Tools; E) Multimedia Systems and Applications; F) Computer Networks, Mobility and Pervasive Systems; G) Intelligent and Decision Support Systems; H) Big Data Analytics and Applications; I) Human-computer Interaction; J) Ethics, Computers & Security; K) Health Informatics; L) Information Technologies in Education; M) Information Technologies in Radiocommunications; N) Technologies for Biomedical Applications.

This book discusses several exciting research topics and applications in the intelligent Heterogenous Networks (Het-Net) and Internet of Things (IoT) era. We are resolving significant issues towards realizing the future vision of the Artificial Intelligence (AI) in IoT-enabled spaces. Such AI-powered IoT solutions will be employed in satisfying critical conditions towards further advances in our daily smart life. This book overviews the associated issues and proposes the most up to date alternatives. The objective is to pave the way for AI-powered IoT-enabled spaces

in the next generation Het-Net technologies and open the door for further innovations. The book presents the latest advances and research into heterogeneous networks in critical IoT applications. It discusses the most important problems, challenges, and issues that arise when designing real-time intelligent heterogeneous networks for diverse scenarios. Includes fundamentals and advances in intelligent heterogeneous network studies and practical applications; Presents important problems, challenges and issues that arise when designing real-time heterogeneous networks for diverse scenarios; Provides an overview of real-time performance issues in heterogeneous networks, specifically about multi-tasking, multi-level scheduling, localization and security issues. .

Digital Nations and Smart Cities are rapidly evolving, and the resulting digitalization is leading to several benefits while also exposing the citizens to unforeseen risks. Technologies like Blockchain are enabling risk management for secured automation. The book takes a close look at various paradigms of Smart cities' & Digital Nations' Governance while relating to the application of these principles in real life through the case study of Singapore, which is one of the world's top 3 densest, but also, is one of the most sustainable cities. This book will be a useful resource for professionals, consultants, government servants, and students who wish to come to grip with the emerging technologies and to understand their applications in governance and play an active role in community-building activities. The book explores the emergence, evolution, and adoption of advanced digital technologies like IoT, Analytics and Blockchain for improved governance, sustainable development, and better quality of life and happiness for citizens across the world.

Recently, cryptocurrencies have made major news headlines. Some people have invested in them, while others have watched in confusion, not sure what it all means. Kyle Michaud admirably takes on the task of unraveling the complexities, taking us through the history of Bitcoin's beginnings before delving into Blockchain's great potential as a distributed decentralized database to change the current third-party paradigm when it comes to everything from healthcare to banking to car sales. You won't find a clearer explanation for Blockchain anywhere, nor a more practical guide in terms of how it can concretely be applied to your everyday life.

How might digital technology and notably smart technologies based on artificial intelligence (AI), learning analytics, robotics, and others transform education? This book explores such question. It focuses on how smart technologies currently change education in the classroom and the management of educational organisations and systems.

2020—the turn of decade, the intended year of Expo, and the eve of the UAE's 50th anniversary—is indeed an opportune time. Even as shockwaves from a truly unexpected disruption, known colloquially as coronavirus and officially COVID-19, resonate around the world, Dubai's diversification as well as its orientation toward innovation will undoubtedly help the Emirate lead the way through a challenging time.The Business Year's country-specific publications, sometimes featuring over 150 face-to-face interviews, are among the most comprehensive annual economic publications available internationally. This 244-page publication covers green economy, banking, capital markets, insurance, energy, industry, telecoms and IT, transport and logistics, maritime, real estate, construction, health, education, and tourism.

The book highlights the rise of Bitcoin, which is based on blockchain technology, and some of the many types of coins and tokens that emerged thereafter. Although Bitcoin and other cryptocurrencies have made national and international news with their dramatic rise and decline in value, nevertheless the underlying technology is being adopted by both industry and governments, which have noted the benefits of speed, cost efficiency, and protection from hacking. Based on numerous downloaded articles, laws, cases, and other materials, the book discusses the digital transformation, the types of cryptocurrencies, key actors, and the benefits and risks. It also addresses legal issues of digital technology and the evolving U.S. federal regulation. The varying treatment by individual U.S. states is reviewed together with attempts by organizations to arrive at a uniform regulatory regime. Both civil and criminal prosecutions are highlighted with an examination of the major cases that have arisen. Whether and how to tax cryptocurrency transactions both in the U.S. and internationally are analyzed, and ends with a speculative narrative of future developments.

A comprehensive guide to understanding the theory and practice of digital entrepreneurship.

Goyal Brothers Prakashan

Develop real-time practical DApps using Ethereum and JavaScript About This Book Create powerful, end-to-end applications for Blockchain using Ethereum Write your first program using the Solidity programming language Change the way you think and design your applications by using the all new database-Blockchain Who This Book Is For This book is for JavaScript developers who now want to create tamper-proof data (and transaction) applications using Blockchain and Ethereum. Those who are interested in cryptocurrencies and the logic and database empowering it will find this book extremely useful. What You Will Learn Walk through the basics of the Blockchain technology Implement Blockchain's technology and its features, and see what can be achieved using them Build DApps using Solidity and Web3.js Understand the geth command and cryptography Create Ethereum wallets Explore consortium blockchain In Detail Blockchain is a decentralized ledger that maintains a continuously growing list of data records that are secured from tampering and revision. Every user is allowed to connect to the network, send new transactions to it, verify transactions, and create new blocks, making it permission-less. This book will teach you what Blockchain is, how it maintains data integrity, and how to create real-world Blockchain projects using Ethereum. With interesting real-world projects, you will learn how to write smart contracts which run exactly as programmed without any chance of fraud, censorship, or third-party interference, and build end-to-end applications for Blockchain. You will learn about concepts such as cryptography in cryptocurrencies, ether security, mining , smart contracts, solidity, and more. You will also learn about web sockets, various API services for Ethereum, and much more. The blockchain is the main technical innovation of bitcoin, where it serves as the public ledger for bitcoin transactions. Style and approach This is a project-based guide that not only gets you up and running with Blockchain, but also lets you create intuitive real-world applications that will make you an independent Blockchain developer.

This book is mostly intended for students. If you can use a programming language, this book will teach you how cryptographic currencies work, how to use them, and how to develop software that works with them. The first few chapters are also suitable as an in-depth introduction to blockchain and bitcoin for noncoders—those trying to understand the inner workings of bitcoin and cryptocurrencies. If you can use a programming language, this book will teach you how smart contract blockchains work, how to use them, and how to develop smart contracts and decentralized applications with them. I also covered an in-depth introduction to Ethereum for noncoders.

Even though blockchain technology was originally created as a ledger system for bitcoin to operate on, using it for areas other than cryptocurrency has become increasingly popular as of late. The transparency and security provided by blockchain technology is challenging innovation in a variety of businesses and is being applied in fields that include accounting and finance, supply chain management, and education. With the ability to perform such tasks as tracking fraud and securing the distribution of medical records, this technology is key to the advancement of many industries.

The **Research Anthology on Blockchain Technology in Business, Healthcare, Education, and Government** is a vital reference source that examines the latest scholarly material on trends, techniques, and uses of blockchain technology applications in a variety of industries, and how this technology can further transparency and security. Highlighting a range of topics such as cryptography, smart contracts, and decentralized blockchain, this multi-volume book is ideally designed for academics, researchers, industry leaders, managers, healthcare professionals, IT consultants, engineers, programmers, practitioners, government officials, policymakers, and students.

Blockchain technology facilitates a decentralized database where business is rendered transparent without the involvement of middlemen. The first use of this technology was its application in digital currency (bitcoin). However, other potential uses of blockchain are yet to be explored. It is expected to have a major impact on cyber security, the internet of things, supply chain management, market prediction, governance, information management, and financial transactions, among others. Blockchain has redesigned the way in which people deal with their money due to its effectiveness, especially in terms of security. Therefore, from the data analytics point of view, investigation of the application of blockchain technology in a wide range of domains is crucial. In this context, this book provides a broad picture of the concepts, techniques, applications, and open research directions in this area, and will serve as a single source of reference for acquiring knowledge on this emerging technology.
This book offers an essential guide to IoT Security, Smart Cities, IoT Applications, etc. In addition, it presents a structured introduction to the subject of destination marketing and an exhaustive review on the challenges of information security in smart and intelligent applications, especially for IoT and big data contexts. Highlighting the latest research on security in smart cities, it addresses essential models, applications, and challenges. Written in plain and straightforward language, the book offers a self-contained resource for readers with no prior background in the field. Primarily intended for students in Information Security and IoT applications (including smart cities systems and data heterogeneity), it will also greatly benefit academic researchers, IT professionals, policymakers and legislators. It is well suited as a reference book for both undergraduate and graduate courses on information security approaches, the Internet of Things, and real-world intelligent applications.
Contrary to most places, Dubai is experiencing more of an acceleration of ongoing trends rather than total disruption at the macro-economic level. Led by DP World, those active within the Emirate's trade ecosystem continue to develop innovative, technology-driven solutions. The novel coronavirus outbreak brought more urgent necessity and faster adoption of such initiatives. This 27-page report features 27 conversations with leading voices throughout the network, such as DP World, Dubai South, DAFZA, Maersk, and Dubai Multi Commodities Centre, to build a clear picture of the state of the sector at this crucial time.
The book presents high-quality research papers presented at the 1st AUE International research conference, AUEIRC 2017, organized by the American University in the Emirates, held on November 15th-16th, 2017 in Dubai. The book is broadly divided into three sections: Media and Smart Cities, Creative Technologies and Innovation, and Security Risks and Strategic Challenges. The areas covered under these sections are cyber-psychology and digital forensics, cloud RAN architecture, networking functions virtualization, e-Governance and IoT semantic interoperability, ERP security, web-based application and problem-solving skills, smart technologies and advertising, smart technologies for smart cities, smart adaptable navigation systems, turbo codes for security key generation, technology advanced student learning and mobile devices, big data security and privacy, multi-channel buffer enabled technique, physiological signal acquisition in electro-oculography, blockchain and donation-based crowdfunding, smart city and framework development approach, news channel and media education, UAE foreign policy, China-GCC relations, diplomacy in the Internet age, intelligent cyber-security strategies, industry securities and strategic challenges, hybrid alliances and corporate security, security and privacy in smart cities, human computer interaction and e-learning solution, complexity of smart cities governance. The papers included in this book present insightful information on the most recent and relevant research, theories and practices in the field, which aim for a sustainable future.
"This book investigates the blockchain technology, its adoption and effectiveness in banking and other industry, and in general, for IoT based applications"--
This book explores the fundamentals of smart cities along with issues, controversies, problems and applications concerning security and privacy in smart city development. Future smart cities must incorporate innovations like smart rainwater harvesting, smart street lighting, digital identity management, solar energy, intelligent transport systems and emerging communication applications. The target audience of the book includes professionals, researchers, academics, advanced-level students, technology developers, doctors and biologists working in the field of smart city applications. Professionals will find innovative ideas for marketing and research, while developers can use various technologies like IoTand block chain to develop the applications discussed here. As the book shows, by integrating new technologies, the cities of the future are becoming a reality today. .
This book presents a wide range of tools and techniques used in entrepreneurial finance in emerging markets. Among them, venture capital is perhaps the best known, understood, and researched mode of entrepreneurial finance. However, a significant focus of the book is dedicated to other modes of entrepreneurial finance such as ‘bootstrapping,’ angel financing, bank financing, and other alternative means of financing, which could include government assistance programs, business incubation, technology parks, or family financing. In addition, the book highlights how new and innovative financial technologies (comprised of software, business processes, and other modern technologies), known under the term of FinTech, may support, enable, and enhance the provision of different modes of entrepreneurial finance in emerging markets. The book also discusses entrepreneurial finance in emerging markets in the context of women entrepreneurs. A comprehensive analysis of entrepreneurial finance in emerging market countries, this book will appeal to academics, researchers, and students of entrepreneurial finance, venture capital and private equity, entrepreneurship, and international business.
The internet has a short history when compared to the time that we have had life on earth. But in this very short period of time, it has taken mankind by a storm. There have been several transformation on the way we transact, and communicate since the time internet was developed. The manner in which we maintain a record of transactions and contracts create the basics of our economic, legal and political system. These instruments help us in protecting our assets and setting organizational boundaries. The record of every transaction or contract helps in the establishment and verification of identities as well as in chronicling events. They oversee the interactions between nations, organizations, communities and individuals. This explains that they are extremely critical tools and they must be managed very effectively and in a highly robust manner to ensure that no one tampers with these records. We have not been able to keep up with technology in the management of these records. And at this time, while most of the companies are looking for processes and methods and some have even established certain tools that can govern the management of such records; but for most part of it, these records are still limited when it comes to their security and management. In a world that is undergoing digital transformation, the way in which we regulate and maintain administrative control requires transformation too.

Every industry will be positively affected by blockchain and AI technology at some point. However, blockchain is a misunderstood technology within the publishing realm. The scholarly publishing industry can significantly improve the flow of research, drive down costs, and introduce new efficiencies in the publishing industry with these new technologies. The scholarly publishing industry is in its early days of the digital transformation, and blockchain and AI technology could play a major role in this. However, the industry has been resistant to change. These reasons include but are not limited to staying with legacy systems, cost of new platforms, changing cultures, and understanding and adopting new technologies. With proper research and information provided, the publishing industry can adopt these technologies for beneficial advancements and the generation of a bright future. Transforming Scholarly Publishing With Blockchain Technologies and AI explores the changing landscape of scholarly publishing and how blockchain technologies and AI are slowly being integrated and used within the industry. This book covers both the benefits and challenges of implementing technology and provides both cases and new developments. Topics highlighted include business model developments, new efficiencies in scholarly publishing, blockchain in research libraries, knowledge discovery, and blockchain in academic publishing. This book is a valuable reference tool for publishers, IT specialists, technologists, publishing vendors, researchers, academicians, and students who are interested in how blockchain technologies and AI are transforming and developing a modern scholarly publishing industry.

This book (CCIS 899) constitutes the refereed proceedings of the First International Conference on Applications of Computing and Communication Technologies, ICACCT 2018, held in Delhi, India, in March 2018. The 30 full papers were carefully reviewed and selected from 109 submissions. The papers are organized in topical sections on communication and system technologies, computing and network technologies, application and services.