

Electronic Circuit Ysis Jntu

The book focuses on novel interpenetrating polymer network (IPN)/semi-IPN technologies for drug delivery and biomedical applications. The dynamism of the design and development of interpenetrating network polymers is based on their ability to provide free volume for the easy encapsulation of drugs in the three-dimensional network structure obtained by cross-linking two or more polymer networks. Natural polymer-based IPNs can deliver drugs at a controlled rate over an extended period of time, while novel IPNs ensure better mechanical strength and sustained/controlled drug-delivery properties. This book presents an overview of the use of this technology to fabricate nanomedicine, hydrogels, nanoparticles, and microparticles, thereby unlocking IPN's potential in the area of drug delivery and biomedical engineering. It also discusses applications of IPN systems in cancer therapy and tissue engineering, and describes the various IPN systems and their wide usage and applications in drug delivery.

This book presents the selected peer-reviewed papers from the national conference Futuristic Approaches in Civil Engineering (FACE) 2019. This volume focuses on latest research and challenges in the field of geotechnical, transportation, environmental and water resources engineering. The first part focuses on alternative and sustainable pavement materials, maintenance and rehabilitation of roads, transportation planning, traffic engineering, hybrid vehicles, safety management, and intelligent transport systems. In the second part of the book, basic and advanced research in geotechnical engineering which can provide sustainable solutions to practical problems in foundations, retaining structures, soil dynamics, site characterization, slope stability, dams, rock engineering, environmental geotechnics, and geosynthetics are covered. The third part of the book includes current research in environment, and water resources engineering. The contents of this book will be useful for students, researchers as well as industry professionals.

This book discusses various machine learning applications and models, developed using heterogeneous data, which helps in a comprehensive prediction, optimization, association analysis, cluster analysis and classification-related applications for various activities in urban area. It details multiple types of data generating from urban activities and suitability of various machine learning algorithms for handling urban data. The book is helpful for researchers, academicians, faculties, scientists and geospatial industry professionals for their research work and sets new ideas in the field of urban computing.

This book provides an introduction to the mathematical and algorithmic foundations of data science, including machine learning, high-dimensional geometry, and analysis of large networks. Topics include the counterintuitive nature of data in high dimensions, important linear algebraic techniques such as singular value decomposition, the theory of random walks and Markov chains, the fundamentals of and important algorithms for machine learning, algorithms and analysis for clustering, probabilistic models for large networks, representation learning including topic modelling and non-negative matrix factorization, wavelets and compressed sensing. Important probabilistic techniques are developed including the law of large numbers, tail inequalities, analysis of random projections, generalization guarantees in machine learning, and moment methods for analysis of phase transitions in large random graphs. Additionally, important structural and complexity measures are discussed such as matrix norms and VC-dimension. This book is suitable for both undergraduate and graduate courses in the design and analysis of algorithms for data.

Theoretical, Computational, and Experimental Solutions to Thermo-Fluid Systems

Soft Computing and Signal Processing

Power Electronics Semiconductor Switches

Proceedings of International Conference on Computational Intelligence and Data Engineering

Select Proceedings of FACE 2019

Power Electronics and Motor Drives

Machine Learning for Networking

This book comprises the best deliberations with the theme “ Smart Innovations in Mezzanine Technologies, Data Analytics, Networks and Communication Systems ” in the “ International Conference on Advances in Computer Engineering and Communication Systems (ICACECS 2020) ” , organized by the Department of Computer Science and Engineering, VNR Vignana Jyothi Institute of Engineering and Technology. The book provides insights on the recent trends and developments in the field of computer science with a special focus on the mezzanine technologies and creates an arena for collaborative innovation. The book focuses on advanced topics in artificial intelligence, machine learning, data mining and big data computing, cloud computing, Internet of things, distributed computing and smart systems.

This book is about applications of remote sensing techniques in the studies on soils. In pursuance of the objective, the book initially provides an introduction to various elements and concepts of remote sensing, and associated technologies , namely Geographic Information System (GIS), Global Positioning System (GPS) in chapter-1. An overview of the sensors used to collect remote sensing data and important Earth observation missions is provided in chapter-2. The processing of satellite digital data (geometric and radiometric corrections, feature reduction, digital data fusion, image enhancements and analysis) is dealt with in Chapter-3. In the chapter to follow the interpretation of remote sensing data , very important and crucial step in deriving information on natural resources including soils resources, is discussed. An introduction to soils as a natural body with respect to their formation, physical and chemical properties used during inventory of soils, and soil classification is given in Chapter-5. The spectral response patterns of soils including hyperspectral characteristics -fundamental to deriving information on soils from spectral measurements, and the techniques of soil resources mapping are discussed in chapter-6 and -7, respectively. Furthermore, the creation of digital soil resources database and the development of soil information systems, a very important aspect of storage and dissemination of digital soil data to the end users are discussed in chapter-8. Lastly, the applications of remote sensing techniques in soil moisture estimation and soil fertility evaluation are covered in chapter-9 and -10, respectively.

This book is a collection of high-quality research work on cutting-edge technologies and the most-happening areas of computational intelligence and data engineering. It includes selected papers from the International

Conference on Computational Intelligence and Data Engineering (ICCIDE 2020). It covers various topics, including collective intelligence, intelligent transportation systems, fuzzy systems, Bayesian network, ant colony optimization, data privacy and security, data mining, data warehousing, big data analytics, cloud computing, natural language processing, swarm intelligence and speech processing.

The book gathers papers addressing state-of-the-art research in all areas of Information and Communication Technologies and their applications in intelligent computing, cloud storage, data mining and software analysis. It presents the outcomes of the third International Conference on Information and Communication Technology for Intelligent Systems, which was held on April 6 – 7, 2018, in Ahmedabad, India. Divided into two volumes, the book discusses the fundamentals of various data analytics and algorithms, making it a valuable resource for researchers' future studies.

Recent Trends in Mechanical Engineering

Select Proceedings of ICIME 2020

First International Conference, CIIT 2011, Pune, India, November 7-8, 2011. Proceedings

Advances in Civil Engineering

Remote Sensing of Soils

Advances in Materials and Manufacturing Engineering

Proceedings of the 6th ICIECE 2017

This book is a collection research papers and articles from the 2nd International Conference on Communications and Cyber-Physical Engineering (ICCCE – 2019), held in Pune, India in Feb 2019. Discussing the latest developments in voice and data communication engineering, cyber-physical systems, network science, communication software, image- and multimedia processing research and applications, as well as communication technologies and other related technologies, it includes contributions from both academia and industry.

This book presents select proceedings of the International Conference on Innovations in Thermo-Fluid Engineering and Sciences (ICITFES 2020). It covers topics in theoretical and experimental fluid dynamics, numerical methods in heat transfer and fluid mechanics, different modes of heat transfer, multiphase flow, fluid machinery, fluid power, refrigeration and air conditioning, and cryogenics. The book will be helpful to the researchers, scientists, and professionals working in the field of fluid mechanics and machinery, and thermal engineering.

This book constitutes the thoroughly refereed proceedings of the Second International Conference on Machine Learning for Networking, MLN 2019, held in Paris, France, in December 2019. The 26 revised full papers included in the volume were carefully reviewed and selected from 75 submissions. They present and discuss new trends in deep and reinforcement learning, pattern recognition and classification for networks, machine learning for network slicing optimization, 5G system, user behavior prediction, multimedia, IoT, security and protection, optimization and new innovative machine learning methods, performance analysis of machine learning algorithms, experimental evaluations of machine learning, data mining in heterogeneous networks, distributed and decentralized machine learning algorithms, intelligent cloud-support communications, resource allocation, energy-aware communications, software defined networks, cooperative networks, positioning and navigation systems, wireless communications, wireless sensor networks, underwater sensor networks.

This book consists of peer-reviewed proceedings from the International Conference on Innovations in Mechanical Engineering (ICIME 2020). The contents cover latest research in all major areas of mechanical engineering, and are broadly divided into five parts: (i) thermal engineering, (ii) design and optimization, (iii) production and industrial engineering, (iv) materials science and metallurgy, and (v) multidisciplinary topics. Different aspects of designing, modeling, manufacturing, optimizing, and processing are discussed in the context of emerging applications. Given the range of topics covered, this book can be useful for students, researchers as well as professionals.

Advances in Applied Mechanical Engineering

Innovations in Electronics and Communication Engineering

Smart Computing and Informatics

Advanced Soft Computing Techniques in Data Science, IoT and Cloud Computing

Select Proceedings of ICRDSI 2019

Basic Electrical Engineering

Proceedings of ICTIS 2018, Volume 1

The two volumes of this book collect high-quality peer-reviewed research papers presented in the International Conference on ICT for Sustainable Development (ICT4SD 2015) held at Ahmedabad, India during 3 – 4 July 2015. The book discusses all areas of Information and Communication Technologies and its applications in field for engineering and management. The main focus of the volumes are on applications of ICT for Infrastructure, e-Governance, and contemporary technologies advancements on Data Mining, Security, Computer Graphics, etc. The objective of this International Conference is to provide an opportunity for the researchers, academicians, industry persons and students to interact and exchange ideas, experience and expertise in the current trend and strategies for Information and Communication Technologies.

The Industrial Electronics Handbook, Second Edition combines traditional and newer, more specialized knowledge that will help industrial electronics engineers develop practical solutions for the design and implementation of high-power applications. Embracing the broad technological scope of the field, this collection explores fundamental areas, including analog and digital circuits, electronics, electromagnetic machines, signal processing, and industrial control and communications systems. It also facilitates the use of intelligent systems—such as neural networks, fuzzy systems, and evolutionary methods—in terms of a hierarchical structure that makes factory control and supervision more efficient by addressing the needs of all production components. Enhancing its value, this fully updated collection presents research and global trends as published in the IEEE Transactions on Industrial Electronics Journal, one of the largest and most respected publications in the field. Power Electronics and Motor Drives

facilitates a necessary shift from low-power electronics to the high-power varieties used to control electromechanical systems and other industrial applications. This volume of the handbook: Focuses on special high-power semiconductor devices Describes various electrical machines and motors, their principles of operation, and their limitations Covers power conversion and the high-efficiency devices that perform the necessary switchover between AC and DC Explores very specialized electronic circuits for the efficient control of electric motors Details other applications of power electronics, aside from electric motors—including lighting, renewable energy conversion, and automotive electronics Addresses power electronics used in very-high-power electrical systems to transmit energy Other volumes in the set: Fundamentals of Industrial Electronics Control and Mechatronics Industrial Communication Systems Intelligent Systems

This book features high-quality research papers presented at the 2nd International Conference on Computational Intelligence in Pattern Recognition (CIPR 2020), held at the Institute of Engineering and Management, Kolkata, West Bengal, India, on 4–5 January 2020. It includes practical development experiences in various areas of data analysis and pattern recognition, focusing on soft computing technologies, clustering and classification algorithms, rough set and fuzzy set theory, evolutionary computations, neural science and neural network systems, image processing, combinatorial pattern matching, social network analysis, audio and video data analysis, data mining in dynamic environments, bioinformatics, hybrid computing, big data analytics and deep learning. It also provides innovative solutions to the challenges in these areas and discusses recent developments.

This book gathers selected research articles from the International Conference on Innovative Product Design and Intelligent Manufacturing System (ICIPDIMS 2019), held at the National Institute of Technology, Rourkela, India. The book discusses latest methods and advanced tools from different areas of design and manufacturing technology. The main topics covered include design methodologies, industry 4.0, smart manufacturing, and advances in robotics among others. The contents of this book are useful for academics as well as professionals working in industrial design, mechatronics, robotics, and automation.

Proceedings of 2nd International Conference on Communication, Computing and Networking

Select Proceedings of ICIPDIMS 2019

Advances in Geotechnical and Transportation Engineering

Proceedings of ICAMME 2019

Computational Intelligence in Pattern Recognition

Proceedings of ICMEET 2017

ICT4SD 2015 Volume 2

The book includes research papers on current developments in the field of soft computing and signal processing, selected from papers presented at the International Conference on Soft Computing and Signal Processing (ICSCSP 2018). It features papers on current topics, such as soft sets, rough sets, fuzzy logic, neural networks, genetic algorithms and machine learning. It also discusses various aspects of these topics, like technologies, product implementation, and application issues.

This book presents selected research papers on current developments in the fields of soft computing and signal processing from the Third International Conference on Soft Computing and Signal Processing (ICSCSP 2020). The book covers topics such as soft sets, rough sets, fuzzy logic, neural networks, genetic algorithms and machine learning and discusses various aspects of these topics, e.g., technological considerations, product implementation and application issues.

The volume contains 94 best selected research papers presented at the Third International Conference on Micro Electronics, Electromagnetics and Telecommunications (ICMEET 2017) The conference was held during 09-10, September, 2017 at Department of Electronics and Communication Engineering, BVRIT Hyderabad College of Engineering for Women, Hyderabad, Telangana, India. The volume includes original and application based research papers on microelectronics, electromagnetics, telecommunications, wireless communications, signal/speech/video processing and embedded systems.

This book comprises select peer-reviewed papers from the International Conference on VLSI, Signal Processing, Power Electronics, IoT, Communication and Embedded Systems (VSPICE-2020). The book provides insights into various aspects of the emerging fields in the areas Electronics and Communication Engineering as a holistic approach. The various topics covered in this book include VLSI, embedded systems, signal processing, communication, power electronics and internet of things. This book mainly focuses on the most recent innovations, trends, concerns and practical challenges and their solutions. This book will be useful for academicians, professionals and researchers in the area of electronics and communications and electrical engineering.

Proceedings of the 2nd International Conference on Communications and Cyber Physical Engineering

Critical Infrastructure Protection XV

Machine Learning Approaches for Urban Computing

ICCCN 2018, NITTTR Chandigarh, India

Interpenetrating Polymer Network: Biomedical Applications

Proceedings of the First International Conference on SCI 2016, Volume 1

ICCCE 2019

This book plays a significant role in improvising human life to a great extent. The new applications of soft computing can be regarded as an emerging field in computer science, automatic control engineering, medicine, biology application, natural environmental engineering, and pattern recognition. Now, the exemplar model for soft computing is human brain. The use of various techniques of soft computing is nowadays successfully implemented in many domestic, commercial, and industrial applications due to the low-cost and very high-performance digital processors and also the decline price of the memory chips. This is the main reason behind the wider expansion of soft computing techniques and its application areas. These computing methods also play a significant role in the design and optimization in diverse engineering disciplines. With the influence and the development of the Internet of things (IoT) concept, the need for using soft computing techniques has become more significant than ever. In general, soft computing methods are closely similar to biological processes than traditional techniques, which are mostly based on formal logical systems, such as sentential logic and predicate logic, or rely heavily on computer-aided numerical analysis. Soft computing techniques are anticipated to complement each other. The aim of these techniques is to accept imprecision, uncertainties, and approximations to get a rapid solution. However, recent advancements in representation soft computing algorithms (fuzzy logic, evolutionary computation, machine learning, and probabilistic reasoning) generate a more intelligent and robust system providing a human interpretable, low-cost, approximate solution. Soft computing-based algorithms have demonstrated great performance to a variety of areas including multimedia retrieval, fault tolerance, system modelling, network architecture, Web semantics, big data analytics, time series, biomedical and health informatics, etc. Soft computing approaches such as genetic programming (GP), support vector machine–firefly algorithm (SVM-FFA), artificial neural network (ANN), and support vector machine–wavelet (SVM-Wavelet) have emerged as powerful computational models. These have also shown significant success in dealing with massive data analysis for large number of applications. All the researchers and practitioners will be highly benefited those who are working in field of computer engineering, medicine, biology application, signal processing, and mechanical engineering. This book is a good collection of state-of-the-art approaches for soft computing-based applications to various engineering fields. It is very beneficial for the new researchers and practitioners working in the field to quickly know the best performing methods. They would be able to compare different approaches and can carry forward their research in the most important area of research which has direct impact on betterment of the human life and health. This book is very useful because there is no book in the market which provides a good collection of state-of-the-art methods of soft computing-based models for multimedia retrieval, fault tolerance, system modelling, network architecture, Web semantics, big data analytics, time series, and biomedical and health informatics.

The book is a compilation of selected papers from 2020 International Conference on Electrical and Electronics Engineering (ICEEE 2020) held in National Power Training Institute HQ (Govt. of India) on February 21 – 22, 2020. The work focuses on the current development in the fields of electrical and electronics engineering like power generation, transmission and distribution, renewable energy sources and technology, power electronics and applications, robotics, artificial intelligence and IoT, control, and automation and instrumentation, electronics devices, circuits and systems, wireless and optical communication, RF and microwaves, VLSI, and signal processing. The book is beneficial for readers from both academia and industry.

Power Electronic Semiconductor Switches is the successor to Professor Ramshaw's widely-used Power Electronics. The text has been completely re-written and expanded to focus on semiconductor switches, and to take into account advances in the field since the publication of Power Electronics and changes in electrical and electronic engineering syllabuses.

Circuits & Networks: Analysis, Design, and Synthesis has been designed for undergraduate students of Electrical, Electronics, Instrumentation, and Control Engineering. The book is structured to provide an in-depth knowledge of electrical circuit analysis, design, and synthesis.

Select Proceedings of ARICE 2019

Proceedings of International Conference on ICT for Sustainable Development

Proceedings of Intelligent System Design: INDIA 2019

Information and Communication Technology for Intelligent Systems

15th IFIP WG 11.10 International Conference, ICCIP 2021, Virtual Event, March 15–16, 2021, Revised Selected Papers

Emerging Trends in Electrical, Communications, and Information Technologies

Advances in VLSI, Signal Processing, Power Electronics, IoT, Communication and Embedded Systems

This volume contains 74 papers presented at SCI 2016: First International Conference on Smart Computing and Informatics. The conference was held during 3-4 March 2017, Visakhapatnam, India and organized communally by ANITS, Visakhapatnam and supported technically by CSI Division V – Education and Research and PRF, Vizag. This volume contains papers mainly focused on applications of advanced intelligent techniques to video processing, medical imaging, machine learning, sensor technologies, and network security.

This book presents high-quality papers from the Third International Conference on Smart Computing and Informatics (SCI 2018?19), organized by the School of Computer Engineering and School of Computer Application, Kalinga Institute of Industrial Technology Deemed to be University, Bhubaneswar, from 21 to 22 December 2018. It includes advanced and multi-disciplinary research on the design of smart computing and informatics, focusing on innovation paradigms in system knowledge, intelligence and sustainability that have the potential to provide realistic solutions to various problems in society, the environment and industry. The papers featured provide a valuable contribution to the deployment of emerging computational and knowledge transfer approaches, optimizing solutions in varied disciplines of science, technology and health care. The book provides insights from the 2nd International Conference on Communication, Computing and Networking organized by the Department of Computer Science and Engineering, National Institute of Technical Teachers Training and Research, Chandigarh, India on March 29–30, 2018. The book includes contributions in which researchers,

engineers, and academicians as well as industrial professionals from around the globe presented their research findings and development activities in the field of Computing Technologies, Wireless Networks, Information Security, Image Processing and Data Science. The book provides opportunities for the readers to explore the literature, identify gaps in the existing works and propose new ideas for research.

This book gathers outstanding papers presented at the International Conference on Advances in Materials and Manufacturing Engineering (ICAMME 2019), held at KIIT Deemed to be University, Bhubaneswar, India, from 15 to 17 March 2019. It covers theoretical and empirical developments in various areas of mechanical engineering, including manufacturing, production, machine design, fluid/thermal engineering, and materials.

Proceedings of ICSCSP 2018, Volume 2

Proceedings of ICECIT-2018

Intelligent System Design

Foundations of Data Science

Proceedings of International Conference on Advances in Computer Engineering and Communication Systems

Proceedings of the 11th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2019)

Proceedings of the Third International Conference on Smart Computing and Informatics, Volume 2

This book highlights recent research on soft computing, pattern recognition and biologically inspired computing. It presents 24 selected papers from the 11th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2019) and 5 papers from the 11th World Congress on Nature and Biologically Inspired Computing (NaBIC 2019), held at Vardhaman College of Engineering, Hyderabad, India, on December 13–15, 2019. SoCPaR–NaBIC is a premier conference and brings together researchers, engineers and practitioners whose work involves soft computing and bio-inspired computing, as well as their industrial and real-world applications. Including contributions by authors from 15 countries, the book offers a valuable reference guide for all researchers, students and practitioners in the fields of Computer Science and Engineering.

This book constitutes the proceedings of the First International Conference on Computational Intelligence and Information Technology, CIIT 2011, held in Pune, India, in November 2011. The 58 revised full papers, 67 revised short papers, and 32 poster papers presented were carefully reviewed and selected from 483 initial submissions. The papers are contributed by innovative academics and industrial experts in the field of computer science, information technology, computational engineering, mobile communication and security and offer a stage to a common forum, where a constructive dialog on theoretical concepts, practical ideas and results of the state of the art can be developed.

This book includes original, peer-reviewed research from the 3rd International Conference on Emerging Trends in Electrical, Communication and Information Technologies (ICECIT 2018), held at Srinivasa Ramanujan Institute of Technology, Ananthapuramu, Andhra Pradesh, India in December 2018. It covers the latest research trends and developments in the areas of Electrical Engineering, Electronic and Communication Engineering, and Computer Science and Information.

This volume comprises select peer reviewed papers presented at the international conference - Advanced Research and Innovations in Civil Engineering (ARICE 2019). It brings together a wide variety of innovative topics and current developments in various branches of civil engineering. Some of the major topics covered include structural engineering, water resources engineering, transportation engineering, geotechnical engineering, environmental engineering, and remote sensing. The book also looks at emerging topics such as green building technologies, zero-energy buildings, smart materials, and intelligent transportation systems. Given its contents, the book will prove useful to students, researchers, and professionals working in the field of civil engineering.

Proceedings of ICEEE 2020

Proceedings of CIPR 2020

ICACECS 2020

Select Proceedings of ICAMER 2019

Microelectronics, Electromagnetics and Telecommunications

Innovative Product Design and Intelligent Manufacturing Systems

Advances in Computing and Information Technology

The international conference on Advances in Computing and Information technology (ACITY 2012) provides an excellent international forum for both academics and professionals for sharing knowledge and results in theory, methodology and applications of Computer Science and Information Technology. The Second International Conference on Advances in Computing and Information technology (ACITY 2012), held in Chennai, India, during July 13-15, 2012, covered a number of topics in all major fields of Computer Science and Information Technology including: networking and communications, network security and applications, web and internet computing, ubiquitous computing, algorithms, bioinformatics, digital image processing and pattern recognition, artificial intelligence, soft computing and applications. Upon a strength review process, a number of high-quality, presenting not only innovative ideas but also a founded evaluation and a strong argumentation of the same, were selected and collected in the present proceedings, that is composed of three different volumes.

This book comprises select peer-reviewed proceedings of the International Conference on Recent Developments in Sustainable Infrastructure (ICRDSI) 2019. The topics span over all major disciplines of civil engineering with regard to sustainable development of infrastructure and innovation in construction materials, especially concrete. The book covers numerical and analytical studies on various topics such as composite and sandwiched structures, green building, groundwater modeling, rainwater harvesting, soil

dynamics, seismic resistance and control of structures, waste management, structural health monitoring, and geo-environmental engineering. This book will be useful for students, researchers and professionals working in sustainable technologies in civil engineering.

This book presents a collection of high-quality, peer-reviewed research papers from the 6th International Conference on Information System Design and Intelligent Applications (INDIA 2019), held at Lendi Institute of Engineering & Technology, India, from 1 to 2 November 2019. It covers a wide range of topics in computer science and information technology, including data mining and data warehousing, high-performance computing, parallel and distributed computing, computational intelligence, soft computing, big data, cloud computing, grid computing and cognitive computing.

Blockchain is emerging as a powerful technology, which has attracted the wider attention of all businesses across the globe. In addition to financial businesses, IT companies and business organizations are keenly analyzing and adapting this technology for improving business processes. Security is the primary enterprise application. There are other crucial applications that include creating decentralized applications and smart contracts, which are being touted as the key differentiator of this pioneering technology. The power of any technology lies in its ecosystem. Product and tool vendors are building and releasing a variety of versatile and robust toolsets and platforms in order to speed up and simplify blockchain application development, deployment and management. There are other infrastructure-related advancements in order to streamline blockchain adoption. Cloud computing, big data analytics, machine and deep learning algorithm, and connected and embedded devices all are driving blockchain application development and deployment. Blockchain Technology and Applications illustrates how blockchain is being sustained through a host of platforms, programming languages, and enabling tools. It examines: Data confidentiality, integrity, and authentication Distributed consensus protocols and algorithms Blockchain systems design criteria and systems interoperability and scalability Integration with other technologies including cloud and big data It also details how blockchain is being blended with cloud computing, big data analytics and IoT across all industry verticals. The book gives readers insight into how this path-breaking technology can be a value addition in several business domains ranging from healthcare, financial services, government, supply chain and retail.

ICCIDE 2020

Smart Intelligent Computing and Applications

Innovations in Electrical and Electronic Engineering

Blockchain Technology and Applications

Select Proceedings of VSPICE 2020

Recent Developments in Sustainable Infrastructure

Proceedings of 3rd ICSCSP 2020, Volume 2

The information infrastructure – comprising computers, embedded devices, networks and software systems – is vital to operations in every sector: chemicals, commercial facilities, communications, critical manufacturing, dams, defense industrial base, emergency services, energy, financial services, food and agriculture, government facilities, healthcare and public health, information technology, nuclear reactors, materials and waste, transportation systems, and water and wastewater systems. Global business and industry, governments, indeed society itself, cannot function if major components of the critical information infrastructure are degraded, disabled or destroyed. Critical Infrastructure Protection XV describes original research results and innovative applications in the interdisciplinary field of critical infrastructure protection. Also, it highlights the importance of weaving science, technology and policy in crafting sophisticated, yet practical, solutions that will help secure information, computer and network assets in the various critical infrastructure sectors. Areas of coverage include: Industrial Control Systems Security; Telecommunications Systems Security; Infrastructure Security. This book is the fourteenth volume in the annual series produced by the International Federation for Information Processing (IFIP) Working Group 11.10 on Critical Infrastructure Protection, an international community of scientists, engineers, practitioners and policy makers dedicated to advancing research, development and implementation efforts focused on infrastructure protection. The book contains a selection of 13 edited papers from the Fifteenth Annual IFIP WG 11.10 International Conference on Critical Infrastructure Protection, held as a virtual event during the spring of 2021. Critical Infrastructure Protection XV is an important resource for researchers, faculty members and graduate students, as well as for policy makers, practitioners and other individuals with interests in homeland security.

This book presents select peer reviewed proceedings of the International Conference on Applied Mechanical Engineering Research (ICAMER 2019). The book examines various areas of mechanical engineering namely design, thermal, materials, manufacturing and industrial engineering covering topics like FEA, optimization, vibrations, condition monitoring, tribology, CFD, IC engines, turbo-machines, automobiles, manufacturing processes, machining, CAM, additive manufacturing, modelling and simulation of manufacturing processing, optimization of manufacturing processing, supply chain management, and operations management. In addition, recent studies on composite materials, materials characterization, fracture and fatigue, advanced materials, energy storage, green building, phase change materials and structural change monitoring are also covered. Given the contents, this book will be useful for students, researchers and professionals working in mechanical engineering and allied fields.

The book is a collection of best selected research papers presented at 6th International Conference on Innovations in Electronics and Communication Engineering at Guru Nanak Institutions Hyderabad, India. The book presents works from researchers, technocrats and experts about latest technologies in electronic and communication engineering. The book covers various streams of communication engineering like signal processing, VLSI design, embedded systems, wireless communications, and electronics and communications in general. The authors have

discussed the latest cutting edge technology and the volume will serve as a reference for young researchers.

Computational Intelligence and Information Technology

Second IFIP TC 6 International Conference, MLN 2019, Paris, France, December 3–5, 2019, Revised Selected Papers

Circuits and Networks:

Select Proceedings of ICITFES 2020

Proceedings of the Second International Conference on Advances in Computing and Information Technology (ACITY) July 13-15, 2012, Chennai, India -