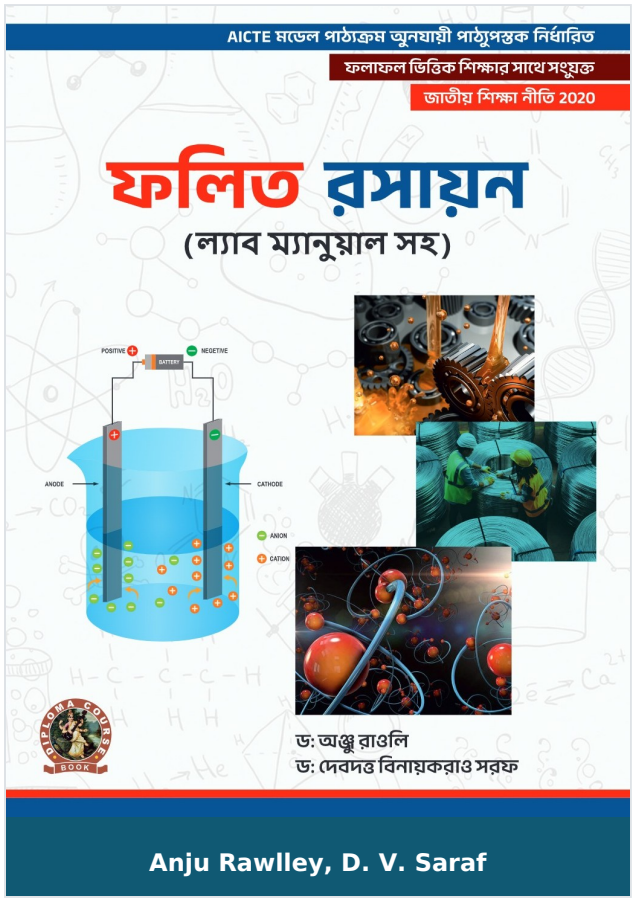


Applied Chemistry (with Lab Manual)

Author :	Anju Rawlley, D. V. Saraf
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Product Description

This text book o “Applied Chemistry” is development as per AICTE model curriculum ,2018, for compulsory course on Applied Chemistry of first years Diploma Program in Engineering and Technology. Atomic Structure, Chemical Bonding & Solution, Water, Engineering Materials, Chemistry of fuels & Lubricants and Electrochemistry are the five units of this book, comprising of both practical and theory.

Some salient features of the book:

1. Course Outcomes and Unit Outcomes are written specifically and are mapped with program Outcomes.

2. Utmost care have been taken to amalgamate the philosophy of outcome based education.

3. The structure of the textbook is comprehensive, where in practical exercises are integral part of each unit.

4. The text is presented in a very simple way with illustrations, examples, tables, flow chart, self -assessment questions and their solutions.

5. Micro projects, points/issue for the creative inquisitiveness & curiosity, know more, video links, case study and summary points are integral part of each unit to facilitate the students to develop the attitude of scientific inquiry, investigate the cause and effect relationship, systematic, scientific & logical thinking , ability to observe, analyse and interpret.

6. To meet the requirement of outcome based education (OBE) and outcome based assessment (OBA), criterion referenced testing (CRT) have been used as an integral part of assessment in each practical.

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7. Sample QR codes have been provided in each units on some topics/sub topics for supplementary reading and reinforcing the learning.

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- Water.
- Engineering Materials.
- Chemistry of Fuels and Lubricants.
- Electro Chemistry.

Author

Anju Rawlley

Anju Rawlley Devdatta Vinayakarao Saraf

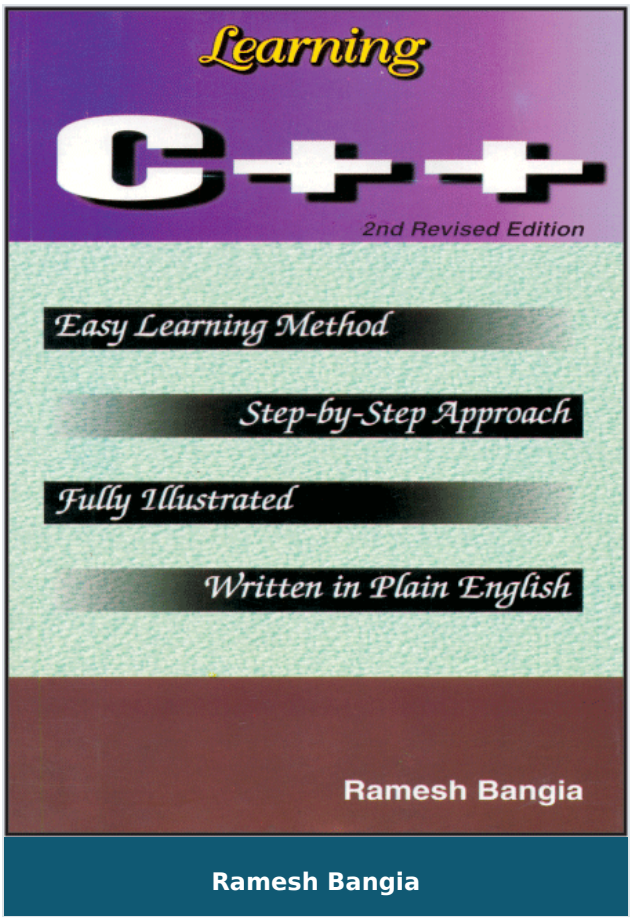
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Ramesh Bangia

Learning C++

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Product Description

Learning of a software is both easy and difficult. It depends upon what level you planning to learn. If you are learning only for the working use, then it is very easy. But, when you try to go deep into it, then you realise how difficult it is to master it. C++ is such a vast subject that it will take a lot of time to understand it fully. This book has been written in mind to make you aware of the options available in the software and how they can be used. It is like telling the child about the steps and stairs. You are the one who is to climb the stair. This book will just guide you how to use the stairs.

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- Pointers
- Standard Library Functions and Header Files
- Programming Methology
- Examples
- Glossary of Key Words
- Questions

Author

Ramesh Bangia

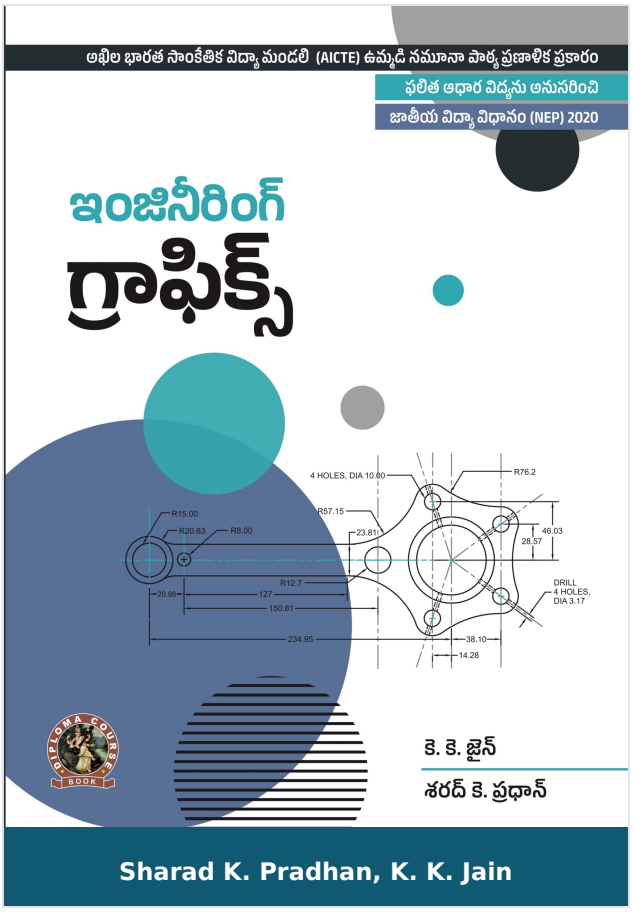
Ramesh Bangia, has been writing computer books on various topics. He has written books for Schools. Training Institutes, Technical Universities, Distance Education Programs, Colleges and General. His tally of books exceeds 500 in number. Trained both in India and Abroad and having studied at IIT Delhi, he becomes automatic choice for most of the

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publishers in India. Though based in Delhi, his books are popular all over India and are even exported to Middle Ease and African countries.



Engineering Graphics

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Product Description

This textbook “Engineering Graphics and Design” is based on the latest outcome based model curriculum of the AICTE. The book covers complete syllabus catering requirements of all major technical universities and institutes and provides insights into traditional engineering graphics as well as treats of the subject using 2D and 3D design software. It offers technical details, current standard, real world examples and clearly explains theory and technique in highly visual and concise format. The topic covered in this book are arranged into 9 chapters comprising self-explanatory diagrams and solved examples.

Salient Features:

1. Introduction of Engineering Drawing.

2. Orthographic Projection.

3. Projection of Solids.

4. Section of Solids and Development of Surfaces.

5. Isometric Projection.

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- Guidelines for Students
- Basic Elements of Drawing.
- Orthographic Projections.
- Isometric Projections.
- Free Hand Sketches of Engineering Elements.
- Computer Aided Drafting Interface.

Author

Sharad K. Pradhan

Sharad K. Pradhan

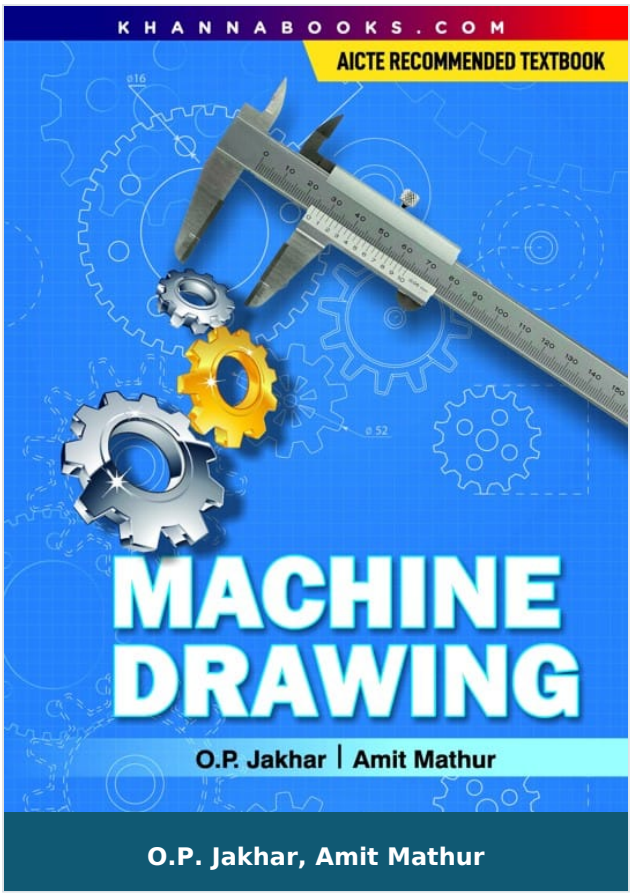
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Machine Drawing

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Product Description

This book is Designed for the students of Engineering and Technology as well as specially for Mechanical Engineering Degree and Diploma students. The teaching of this course faces difficulty in explaining the various concept of machine drawing viz., orthographical projection, sectioning, complicated mechanical assembly drawing etc. Sometimes explanation requires some three dimensional and complicated drawing to be drawn on the black board which is quite impossible due to the time constraint of class.

This book is an outcome of the strong need felt by students offering the course and the teaching need felt by us. The teacher can explain the related concepts, drawing methods and uses of various parts being drawn etc. in each practical class without bothering the black board.

The subject matter has been compressed from the view point of Mechanical Engineering students.

The book also contains Basic Drawing Softwares which describes about the basics of Auto-CAD, CATIA, PROE, ANSYS etc. which is useful for today's need of Engineering & Technology.

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- Screw Threads and Fasteners
- Bearings & Shaft Coupling
- Assembly Drawing
- Power Transmission Drives
- Basics Drawing Softwares

Author

O.P. Jakhar

Dr. O.P. Jakhar got commissioned as Lieutenant in NCC in 2005 and presently he is serving as Captain at 7 Raj. BN. NCC, Bikaner.

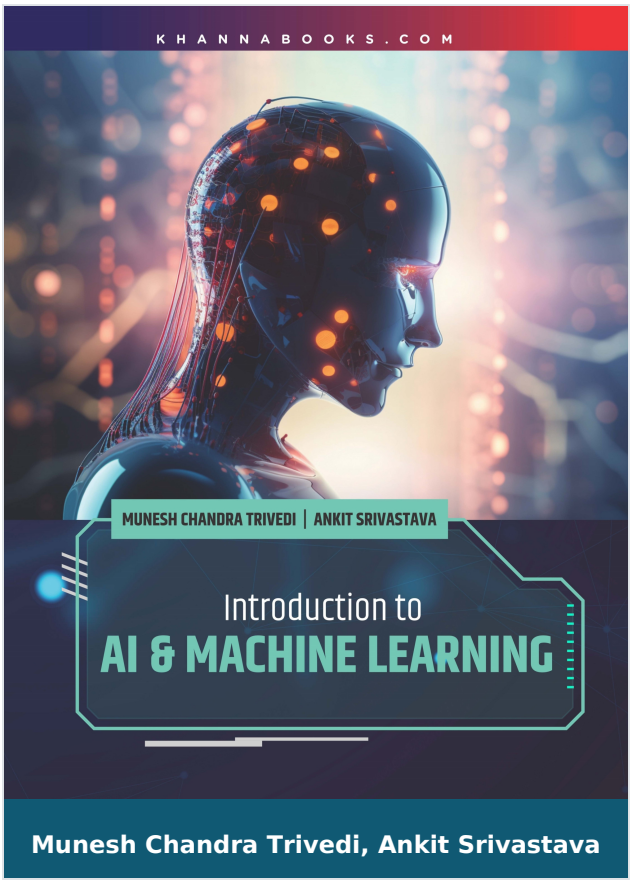
Amit Mathur

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Introduction to AI & Machine Learning

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Product Description

INTRODUCTION TO AI & MACHINE LEARNING

“Introduction to AI and Machine Learning” is a comprehensive guide designed for readers who are new to the fields of artificial intelligence (AI) and machine learning (ML) The book aims to demystify these valuable insights for those with some foundation Knowledge.

This book is ideal for students and educators seeking a thorough introduction to AI and ML. By the end of the book, readers will have a solid understanding of the fundamental concepts of AI and ML and will be able to write basic AI and ML programs using python.

KEY FEATURES OF THE BOOK

1. Simple Language: Utilizes straightforward and easily understandable language throughout the text.

2. Engaging Learning Experience: Incorporates hands -on activities to enhance the learning experience.

3. Foundational Concepts: Introduces AI and ML, covering weak vs. strong AI, machine learning methods (supervised, unsupervised and reinforcement learning), and optimization techniques.

4. Search Algorithms: Discusses Problem- solving strategies such as BFS, DFS, and A*, with illustrations from examples like the water jug and 8- queen problems.

5. Practical Applications: Highlights real- world applications across various industries, supported by case studies and examples.

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- (Logistic Regression).
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Author

Munesh Chandra Trivedi

Dr. Munesh Chandra Trivedi has more than 20 years of experience in the field of computer science & Engineering and has worked in Prestigious Institutions. He has more than 10 years' experience in various administrative responsibilities e.g., Dean (academics), Head of Department, TEQIP-111 Coordinator, PG coordinator, EDC cell Coordinator. Currently working Tripura, India, and Associate Professor and HoD (IT), Rajkiya Engineering College, Azamgarh, up (state Govt Institution of UP) with the additional responsibility of Dean Academics of the institute & Associate Dean UG Programs, Dr. APJ Abdul Kalam Technical University, Lucknow (State Technical University). He was also the Director (In-charge) at Rajkiya Engineering College, Azamgarh. He had successfully filed 81 patents (65 National and 16 International Patents (Germany, South Africa, and Australia)), out of which 40 patents were granted. He has published 12 textbooks and 168 research papers in different International Journals and proceedings of repute. He has also edited 38 books for springer Nature. He successfully supervised 14 PhD students and received numerous awards, including the Young scientist Visiting Fellowship, Albert Einstein Research scientist Award, Best senior Faculty Award, Outstanding Scientist, Dronacharya Award, Author of the Year, and vigyan Ratan award

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from different national, as well as international forums. He has organized more than 32 international conferences technically sponsored by IEEE, ACM, AND Springer. Dr.

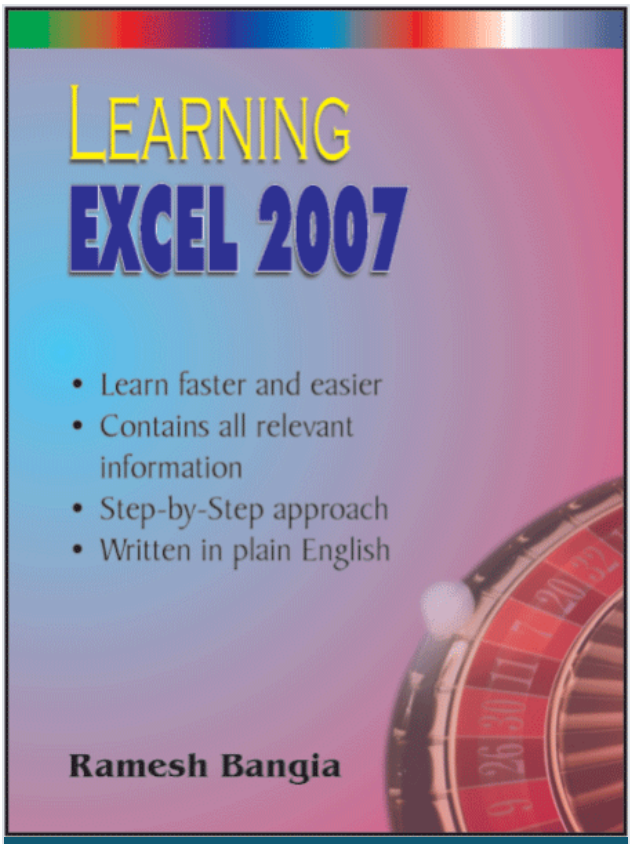
Ankit Srivastava

Mr. Ankit Srivastava is a dedicated academic and researcher with over six years of teaching experience in various engineering colleges and the National Institute of Electronics and Information Technology (NIT), Agartala, Tripura, India. His research primarily focuses on medical imaging and image processing, with an emphasis on leveraging artificial intelligence to contribute to technological advancements in healthcare. Mr. Srivastava has published six research papers in reputed SCI-E and Scopus-Indexed Journal, as well as in several national and international conferences. He also holds three national patents and is the author of a book titled “Introduction to AI and Machine Learning.” His academic journey reflects a strong commitment to innovation, Knowledge dissemination, and research excellence in the field of artificial intelligence and its application in medical science.

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Ramesh Bangia

Learning Excel 2007

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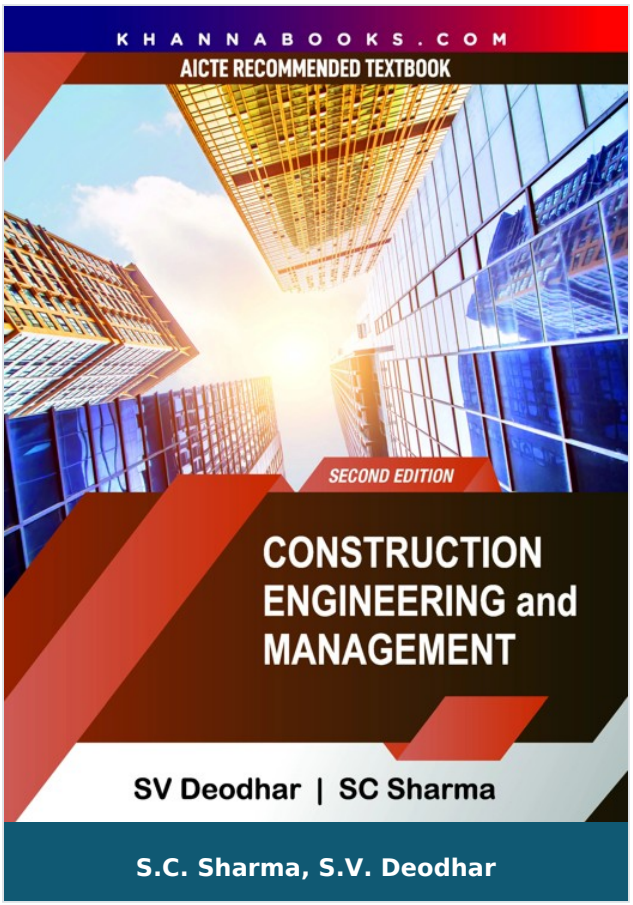
Ramesh Bangia

Ramesh Bangia, has been writing computer books on various topics. He has written books for Schools. Training Institutes, Technical Universities, Distance Education Programs, Colleges and General. His tally of books exceeds 500 in number. Trained both in India and Abroad and having studied at IIT Delhi, he becomes automatic choice for most of the publishers in India. Though based in Delhi, his books are popular all over India and are even exported to Middle Ease and African countries.

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Construction Engineering and Management

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Product Description

This book cover the syllabi of Contraction Engineering for Degree as well as Diploma students and is also useful for practicing engineers.

Construction covers varies forms of activities ranging from houses to high rise buildings, industrial structures, road construction, expressways, bridge, dams barrages, runways, ports, canals, railways etc. These high value projects involve management of materials, equipment human and financial resources, information system, control management etc.

In today's modern technology projects, there is need for detailed planning and management techniques, and with the growing use of machinery, it has become necessary for construction engineers to be thoroughly familiar with the working application and upkeep of the wide range of the modern equipment.

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- Earth Moving Equipment,
- Hauling (Transportation) Equipment,
- Concreting Equipment,
- Pumping and Dewatering Equipment,
- Hoisting Equipment (Lifting and Elevating Equipments, and Cranes.

Author

S.C. Sharma

S.C. Sharma after graduation in 1966 joined as lecturer in Mechanical Engineering. He had been associated for more than 4 decades in various fields including learning and management of projects in India and abroad in different capacities. While working Hydro power projects for more than 15 years he has actively associated with various

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environmental and rehabilitation & resettlement issues and successfully resolved various complicated issues. He has also worked as consultant for matters related to safety, environment and R & R. He has written about a dozen books on subjects related to engineering and management including management of projects.

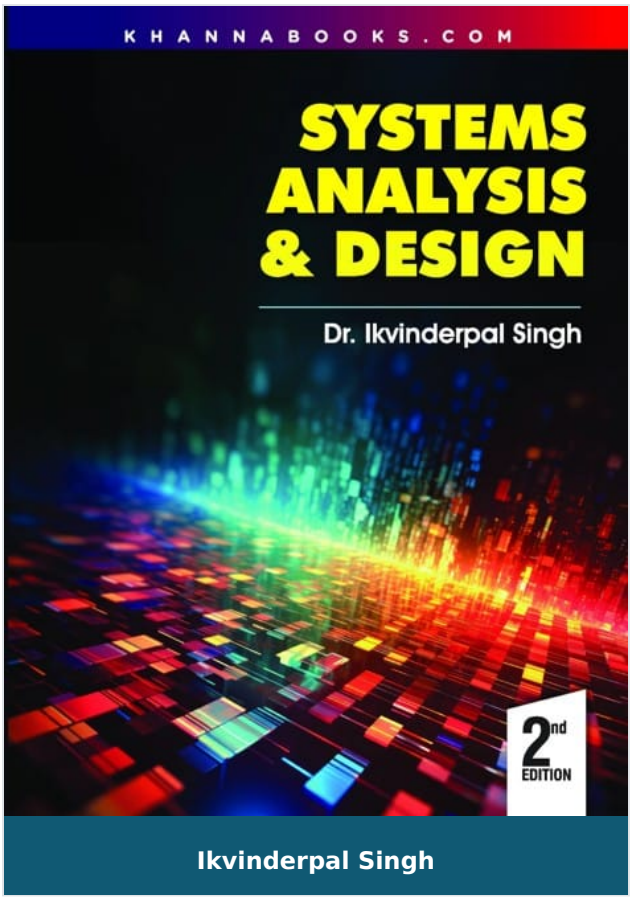
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Ikvinderpal Singh

Systems Analysis and Design

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Product Description

Systems analysis and design (SAD) in an exciting, active field in which analysts continually learn new techniques and approaches to develop systems more effectively and efficiently. However, there is a core set of skills that all analysts need to know no matter what approach or methodology is used. All information system projects move through the five phases of planning, analysis, design, implementation and maintenance; all projects require analysts to gather requirements, model the business needs, and create blueprints for how the system should be built; and all projects require an understanding of organizational behavior concepts like change management and team building. This book captures the dynamic aspects of the field by keeping students focused on doing SAD while presenting the core set of skills that we feel every systems analyst needs to know today and in the future. It also builds on our professional experience as systems analysts and on our experience in teaching SAD in the classroom.

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- User-Interface Design
- Coding & Documentation
- System Testing
- System Testing Strategies
- System Quality
- System Maintenance & Supports Users

Author

Ikvinderpal Singh

Dr. Ikvinderpal Singh is an Assistant Professor at Trai Shatabdi Guru Gobind Singh Khalsa college Amritsar, bringing 17+ years of academic leadership and research experience to the field of computer science. A Gold Medalist in B.Sc. IT, with an MCA (Distinction) and a Ph.D. in Neural Networks and Image Processing, he is known for blending rigorous

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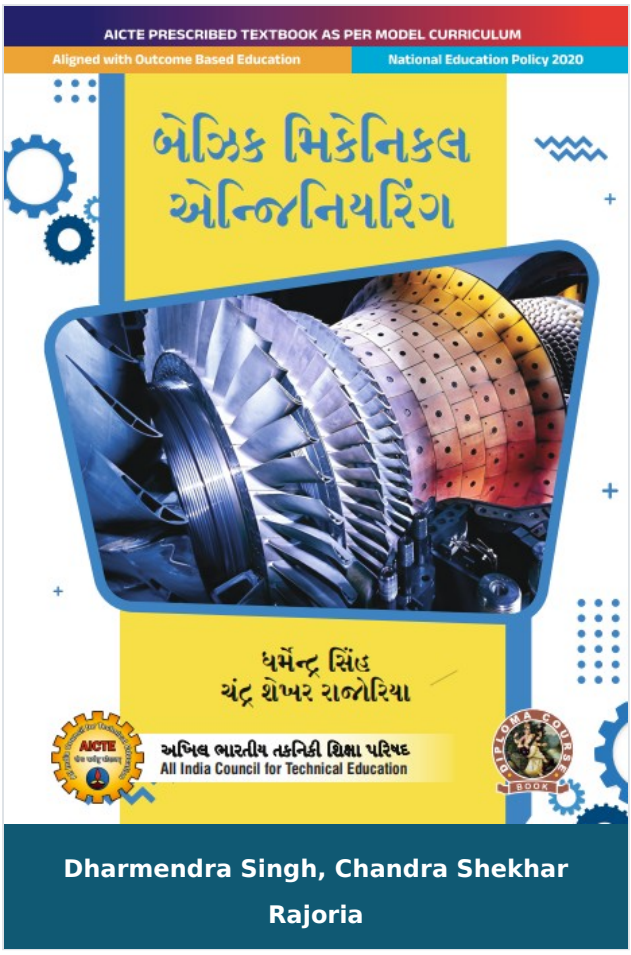
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research with practical innovation. A prolific academic creator, he has authored 37 books, published 82+ research papers, and designed 100+ industry-aligned skill-development courses. His expertise extends to doctoral evaluation, supervision, and active participation on 100+ editorial and review boards worldwide.

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Basic Mechanical Engineering

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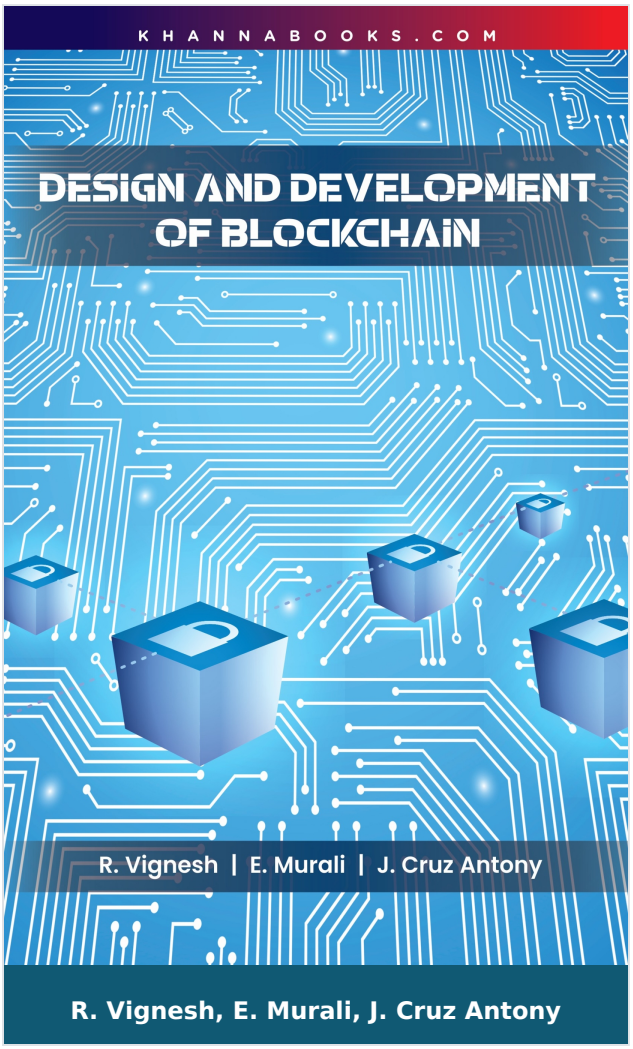
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Design and Development of Blockchain

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Product Description

"Design and Development of Blockchain" offers a comprehensive and practical guide to understanding the fundamentals and applications of blockchain technology. The book bridges the gap between theoretical concepts and hands-on implementation by providing detailed coverage of Distributed Ledger Technology (DLT), consensus mechanisms such as Proof-of-Work (PoW) and Proof-of-Stake (PoS), and the principles of cryptoeconomics. Discussions are grounded in real-world blockchain platforms, including Bitcoin and Ethereum.

The primary objective of the book is to equip readers with both conceptual knowledge and practical skills needed to design, implement, and innovate blockchain solutions. It explains decentralization in depth, covering decentralized computing, storage, and communication systems. The text also explores Smart Contract and Decentralized Application (DApp) development while addressing important industry challenges such as scalability, energy efficiency, and security. Additionally, it examines blockchain integration with Artificial Intelligence (AI), Internet of Things (IoT), and Cloud Computing.

This book serves as a valuable resource for students, researchers, developers, and industry professionals interested in building secure, efficient, and future-ready blockchain-based systems.

Salient Features:

- • Cryptoeconomic Principles: Explores the economic incentives and cryptographic security mechanisms that resolve the Byzantine General's Problem in decentralized P2P networks.

  • Architectural Components: Details the core building blocks of a blockchain, including blocks, hashing, digital signatures, and the structural variations in Bitcoin

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and Ethereum blocks.

• Practical Consensus: Clarifies the operation, advantages, and energy trade-offs of major consensus algorithms, such as Proof-of-Work (PoW), Proof-of-Stake (PoS), and other hybrid models.

• Hands-on Chain Building: Provides a step-by-step guide to developing an independent blockchain, covering P2P network creation, Genesis Blocks, registering miners, and block storage.

• Ethereum Development: Offers practical instruction on setting up the Ethereum environment using developer tools like Ganache and Truffle Suite to create, test, and deploy functional Smart Contracts.

• Decentralization Ecosystem: Focuses on achieving full ecosystem decentralization for computation, storage, and communication, along with developing decentralized applications (DApps) and DAOs.

• Emerging Technology Integration: Delves into the intersection of blockchain with AI, IoT, and Cloud Computing, showcasing how it enhances data integrity, network security, and automation in various sectors.

• Security and Challenges: Addresses key technical and commercial hurdles, including scalability limitations, energy efficiency concerns, regulatory frameworks, and mitigating DDoS and Sybil attacks.

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