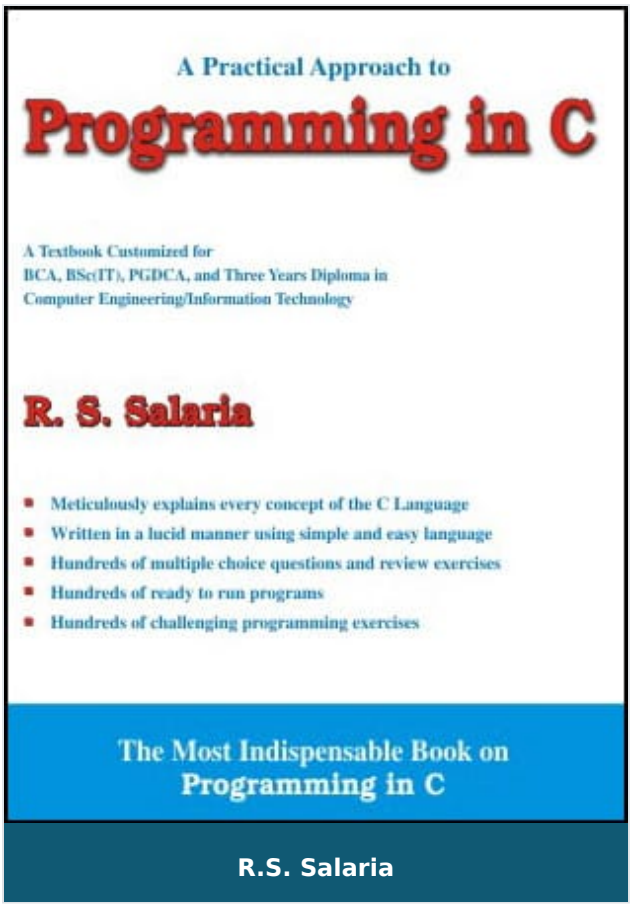


A Practical Approach to Programming in C

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Product Description

The subject of programming in C is one of the compulsory courses in the curriculum of BCA, BSc (IT), BSc (Non-Med) with Computer science as one of the elective subject, PGDCA, and Three Year polytechnic diploma in Computer Engineering as well as Information Technology of all universities and state technical boards. The book in your hand is a customized version of my popular book application programming in C to serve as a textbook for the students taking these course. The presentation is kept simple and illustrative so that even an average reader can grasp the subject matter with quite ease. Practically, this book will provide you every thing you need on the subject of programming in C. Provides a comprehensive coverage of the subject. Demonstrate the development of programs in a good programming style. Large number of ready to run programs for reference. Large number of multiple choice questions and review exercises to test your knowledge about the subject learned. Large number of programming exercises to test your programming skills acquired.

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- Overview of C Language
- Data Types Operators and Expressions
- Handling Keyboard Input and Screen Output
- Control Statements
- Functions
- Arrays
- Pointers
- Structures and Unions
- String Processing
- Files

Author

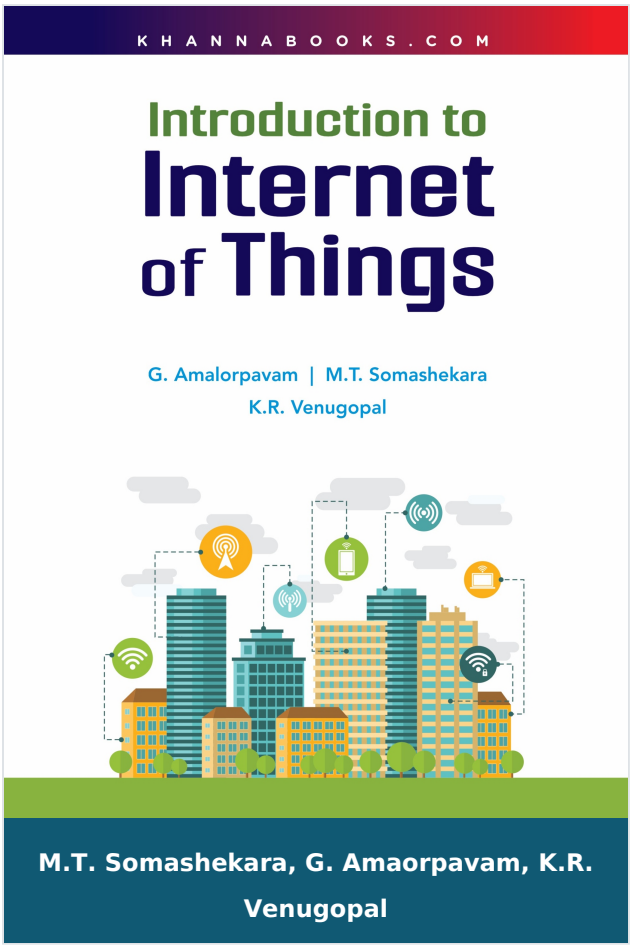
R.S. Salaria

Prof. R.S. Salaria is a superior teacher, a prolific author and a great motivator. He is an alumnus of IIT, Delhi. He is a Certified Software Quality professional by Ministry of Information Technology, Govt. of India: Sun Certified Programmer as well as Sun Certified Trainer by SUN Microsystems. He is a life member of computer society of India, Mumbai: Institution of Electronics and Telecommunication Engineers, New Delhi: Indian Society for Technical Education, New Delhi: Punjab Academy of Sciences, Patiala. Presently, he is talking initiatives to Sensitize the citizens of this great country about their fundamental responsibilities towards society and seeking their contributions to make the society a wonderful place for happy and peaceful living. </p

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Introduction to Internet of Things

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Product Description

Introduction to Internet of Things

The Internet of Things (IoT) greatly influences lifestyles; it is transforming the way people interact with the environment. It is not merely a technological advancement; it is leading to transformation of lifestyle. It is reshaping industries and providing new opportunities in every field of modern life, starting from homes to industries.

This book is just a journey into the evolving world of IoT. It is helpful for both beginners learning the basic concepts and professionals who wish to upgrade their skills. The book covers the introductory material on Internet of Things and covers the syllabi of many universities on the subject. It is expected to be the first book on the area to be read by the readers as it is easy to follow and accessible to the students of UG and PG students of Computer Science and Computer Applications offered by the Indian Universities

Salient Features

- This book is self-readable, comprehensive, and highly informative.
- It provides the necessary skills for learners to design any IoT application.
- Detailed information on Tinkercad software and Arduino programming.
- Good number of review questions in each chapter
- Chapter end summary and multiple-Choice Questions with answers

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- Architectural Overview
- Architecture Reference Model
- Internet of Things Privacy, Security and Governance
- Developing IoT Solutions
- Introduction to Arduino UNO
- Answers for Multiple Choice Questions
- Appendix A: Programming Using Tinkercad Arduino Simulator
- Appendix B: Arduino Programming
- Bibliography
- List of Web Sites

Author

M.T. Somashekara

M.T. Somashekara is with the Department of Computer Science and Applications, Bangalore University, Bengaluru. He has over two decades of teaching experience at both

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UG and PG levels. He has authored three other books ‘Problem Solving with C’, ‘Object-Oriented Programming with C++’’ and ‘Object-Oriented Programming with JAVA’ published by PHI Learning Private Limited, New Delhi and all of these have seen multiple editions. They have been adopted as textbooks/reference books for UG and PG courses of more than a hundred universities and autonomous colleges in the country. He has also authored a unique motivational and directional book on authoring academic books entitled ‘The Journey – From Being a Reader to Becoming an Author’ brought out by Khanna Publishing House and it is useful for those aspiring to become academic authors as it not only motivates but guides also as to how to go about academic authoring. He has several research papers to his credit in national and international journals. He is a life member of ISTE CSI, ISCA, and IUPRAI. His areas of academic interest include Data Structures, Algorithms, Programming Languages, Operating Systems, and Databases. His areas of research include Image Processing and Pattern Recognition.

G. Amaorpavam

G. Amalorpavam Assistant Professor Department of Computer Applications Sambhram Academy of Management Studies, Bangaluru M.T. Somashekara Professor, Department of Computer Science and Applications Bangalore University, Bangaluru K.R. Venugopal Former Vice-Chancellor Bangalore University, Bangaluru

K.R. Venugopal

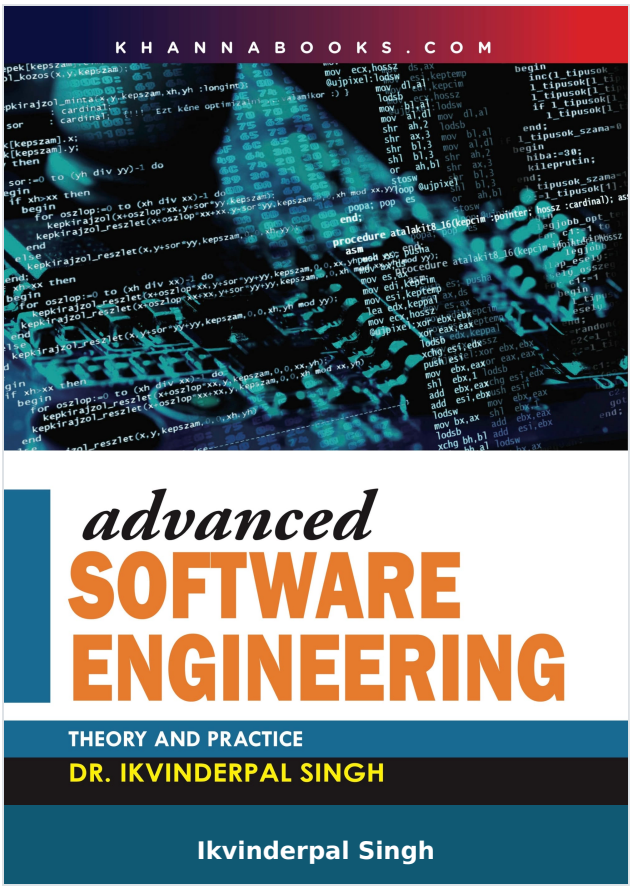
K.R. Venugopal is the Vice-Chancellor of Bangalore University. He has an illustrious, distinguished, and brilliant academic career with Eleven degrees including two Ph.Ds, one in Economics from Bangalore University and another Ph.D. in Computer Science and Engineering from IIT Madras. He has served UVCE and Bangalore University for over the last four decades. He received his ME degree in Computer Science Engineering from the Indian Institute of Science, Bangalore, Bachelor of Engineering in Electronics and Communications from UVCE and has also obtained degrees in Law, Journalism, Public

Relations, Business Finance, Economics, Industrial Relations, and Communications. He was a Post Doctoral Research Scholar and Visiting Professor at the University of Southern California, USA. He has authored and edited 72 books in Economics and Computer Science published more than 1000 papers in refereed International Conferences and Journals and has been credited with 24 patents. He has established two Engineering colleges and two schools in Bangalore. He has awarded Ph.Ds to 30 students and informally guided more than 150 Research Scholars and supervised more than 700 Post Graduate dissertations in Computer Science and Engineering. He received IEEE Fellow and ACM Distinguished Educator award from the USA for his outstanding contributions to Computer Science and Engineering.

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Advanced Software Engineering

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Product Description

Introduction to the software engineering milieu. Describe the software engineering Paradigms. Deals with planning and estimation. Describe the re engineering process. Deals with object oriented metrics. Describes the object-oriented analysis and design. Detailed explanation of software agents.

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- Software Quality
- Software Realiability
- Software Economics
- Software Re engineering
- Software Re engineering Process
- Software Reuse
- Object Oriented Metrics
- Object Oriented Analysis & Design
- Element Of An Object-Oriented Model
- Software Agents
- Application Of Software Agents

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 research with practical innovation. A prolific academic creator, he has authored 37 books,

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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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Programming in Python

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Product Description

This comprehensive textbook, The Complete Guide to Programming in Python, is a foundational resource designed to transform absolute beginners into proficient Python developers. The core theme of the book is simplicity meets versatility: Python's global popularity is rooted in its highly readable syntax and its powerful application across diverse fields like web development, data science, and automation.

The book's primary purpose is to deliver a systematic, hands-on learning experience. It begins by establishing the fundamentals—such as the easy-to-understand syntax, diverse expression types, and key data structures like Numeric, Sequence (Lists, Tuples), and Mapping (Dictionaries)—before seamlessly progressing to advanced topics. Readers will master essential control flow techniques, including conditional statements (if/elif/else, match-case) and iterative loops (for/while), and learn to structure complex code using Object-Oriented Programming (OOP) principles (Inheritance, Polymorphism). The practical value is reinforced by specialized units on handling errors through robust exception handling, interacting with the PyMongo database, and building visually appealing applications using Tkinter. The target audience includes students in computer science, newcomers to programming, and professionals from any domain who require a solid, application-focused grounding in one of the world's most demanded programming languages.

Salient Features:

• Foundational Syntax Mastery: An ideal starting point covering all of Python's core features, from its easy-to-understand syntax and diverse expression types (Arithmetic, Logical) to detailed rules for operator precedence.

• Comprehensive Data Structures: A dedicated section that thoroughly explores all built-in data types: Numeric (int, float), Sequence (list, tuple, string), Mapping (dict), and Set

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types, complete with practical code implementations.

• Control Flow and Logic: Offers full coverage of flow control mechanisms, from basic if-else and nested conditions to the modern match-case statement, ensuring the ability to write robust program logic.

• Essential Built-in Functions: Provides an extensive, tabulated reference of over 50 vital built-in functions, each accompanied by practical code snippets demonstrating its correct usage and return value.

• OOP Principles Explained: Delivers clear, practical instruction on Object-Oriented Programming, covering Inheritance, Polymorphism (Overriding, Overloading), and Data Abstraction using Python-specific examples.

• Ecosystem and Libraries: Introduces the vast Python ecosystem, detailing how to create and use custom modules and presenting key external libraries like NumPy and Pandas for data manipulation.

• GUI Application Development: Step-by-step guidance on creating rich Graphical User Interfaces (GUIs) using the standard Tkinter library, thoroughly covering layout managers and all essential widgets.

• Practical Database Integration: Hands-on instruction for connecting to and performing full CRUD (Create, Read, Update, Delete) operations on a NoSQL database, specifically using the PyMongo library for MongoDB.

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- Database and Networks

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K. Abinaya

K. Abinaya

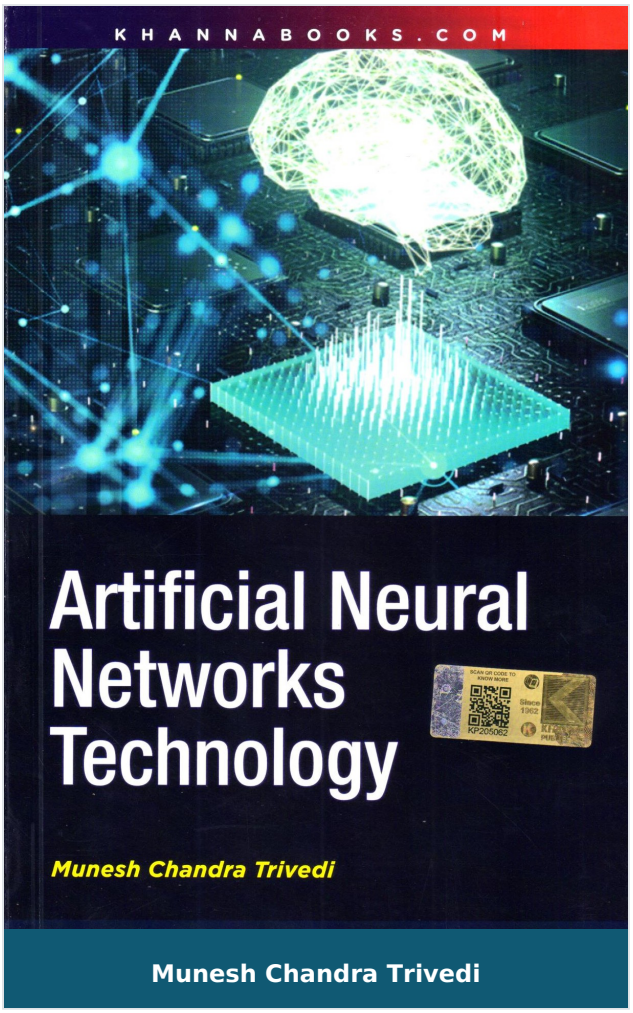
Saraswathi

Saraswathi Devi for given me the support and encouraging me to achieve goals successfully. I co-authored books on "Computer Fundamentals", Data Science with Machine Learning using R. Dr. K. L. Vasundhara, HOD & Assoc. Professor, Dept. of Mathematics, Thank my Mentor Prof. M. V. Ramana Murthy (Former Head and BOS Chairman, Dept. of Mathematics and Computer Science, OU, Hyderabad) for his guidance, time, ideas and help. I am greatly indebted to Sri Krishna Rao (Correspondent, Stanley College of Engineering and Technology for Women, Hyderabad) for his support. It is imperative on my behalf to remember my behold Mother Late Smt. K. Varalakshmi and my Father-in-Law Late Sri. Yerasuri Gopala Krishna Murthy for their divine blessings. Recipient of "UTTAMA ADYAPIKA AWARD" 2022, " JYSTA ACH ARNA AWARD" 2024 and authored 16 papers in various National & International Journals, Co- authored books on " Engineering Mathematics-IV", "Data Science with Machine Learning using R". AICTE nominated expert for Data Analytics and having 6 Patents. Prf.

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Artificial Neural Networks Technology

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Product Description

There are many books available in the market on the proposed topic but none of them can be termed as comprehensive. Besides, students face many problems in understanding the language of the books. Keeping these points in mind, artificial neural network Technology was prepared. which should be simple enough to comprehend and comprehensive enough to encompass all the topics of different institutions and universities. Simple & easily understandable language. Includes real world examples to illustrate the concepts, contains latest topics such as downsizing & right sizing, etc, provides numerous illustrations, examples and end-chapter exercises.

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- Software Architecture
- Network-based Application Architecture
- Network-based Architectural Styles
- Designing the Web Architecture: Problems and Insights
- Representational State Transfer (REST)
- Experience and Evaluation

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

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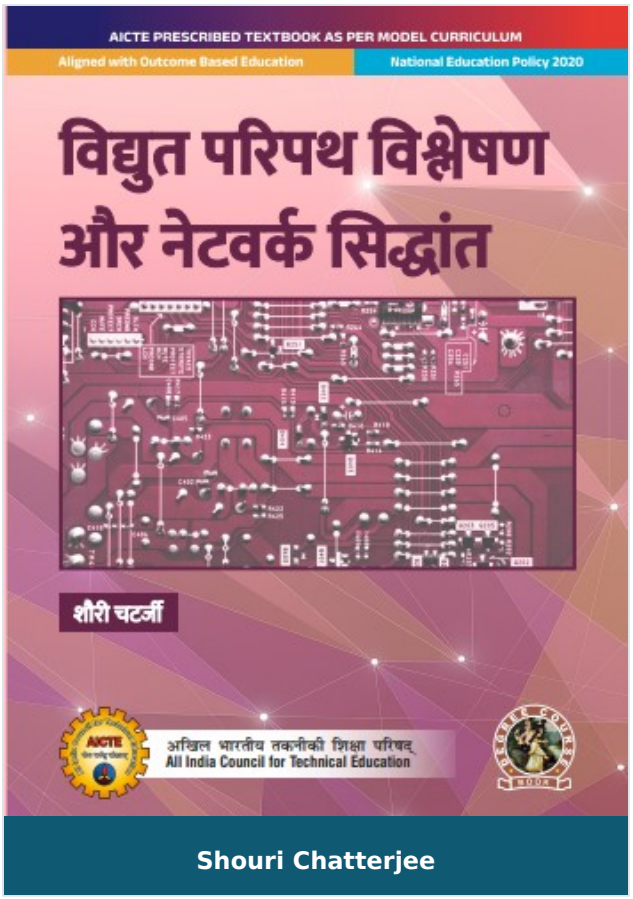
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additional responsibility of Dean Academics of the institute & Associate Dean UG Programs, Dr. APJ Abdul Kalam Technical University, Lucknow (State Technical University). He was also the Director (In-charge) at Rajkiya Engineering College, Azamgarh. 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 from different national, as well as international forums. He has organized more than 32 international conferences technically sponsored by IEEE, ACM, AND Springer. Dr.

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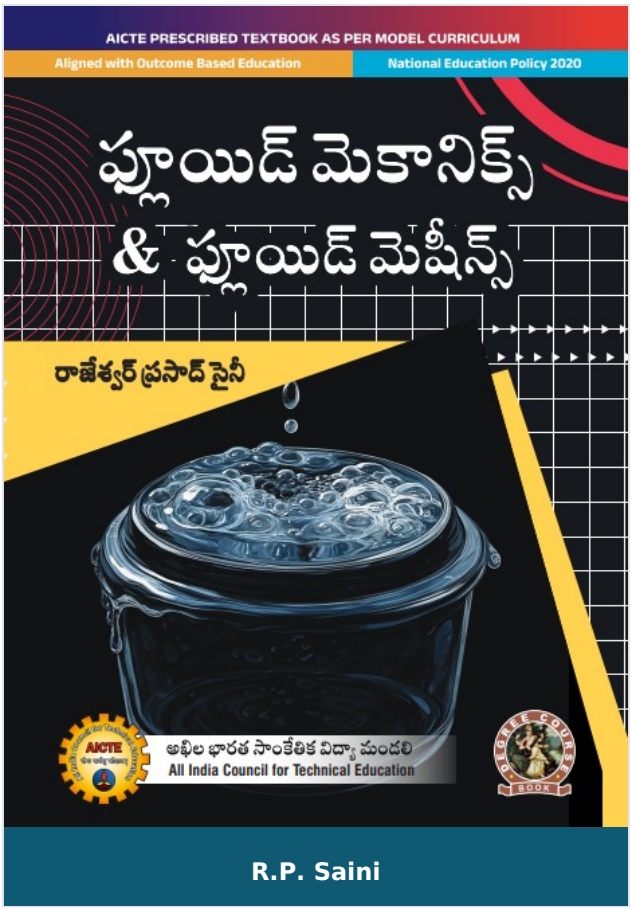
Shouri Chatterjee

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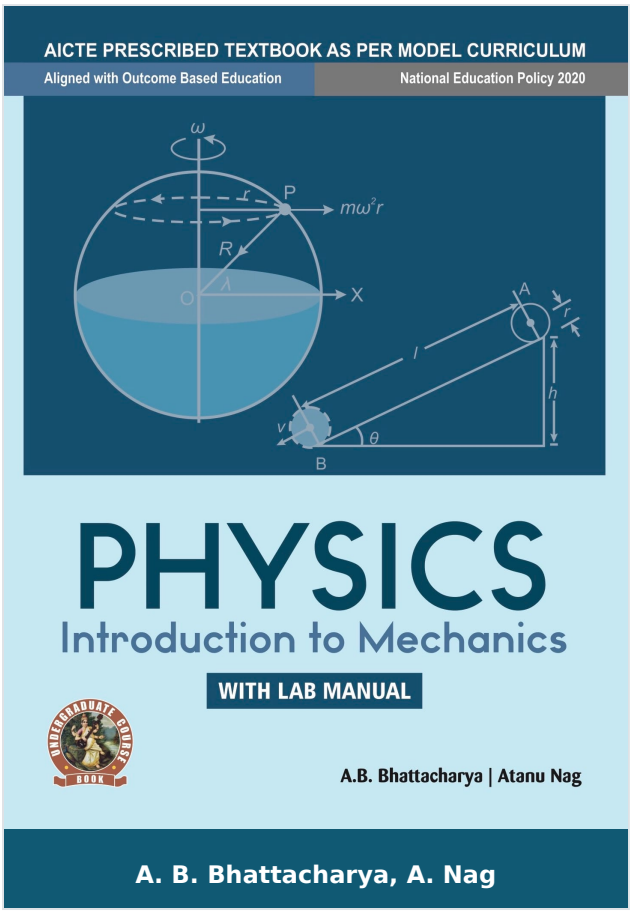
R.P. Saini

Dr. R.P. Saini Department of Hydro and Renewable Energy Indian Institute of Technology Roorkee

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Physics (Introduction to Mechanics) (with Lab Manual)

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Product Description

Physics: Introduction to Mechanics has been written for the first year students of B Tech Engineering Degree Courses of all Indian Universities following the guideline and syllabus as recommended by AICTE. The book, written in a very simple and lucid way, will be very much helpful to reinforce understanding of different aspects to meet the engineering student’s needs. Writing a text-cum manual of this category poses several challenges providing enough content without sacrificing the essentials, highlighting the key features, presenting in a novel format and building informative assessment. This book on engineering physics will prepare students to apply the knowledge of Mechanics to tackle 21 century and onward engineering challenges and address the related questions.

Some Salient features of the book:

·Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject.

·To develop knowledge on critical questions solved and supplementary problems covering all type of medium and advanced level

· Under problems in a very logical and systematic manner.

· Some essential information for the user the heading “Know more” for clarifying some basic information as well as comprehensive synopsis of formulae for a quick revision of the basic principles.

· Constructive manner of presentation so that an Engineering degree students can prepare to work in different sectors or in national laboratories at the very forefront of technology.

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Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness hon0red him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

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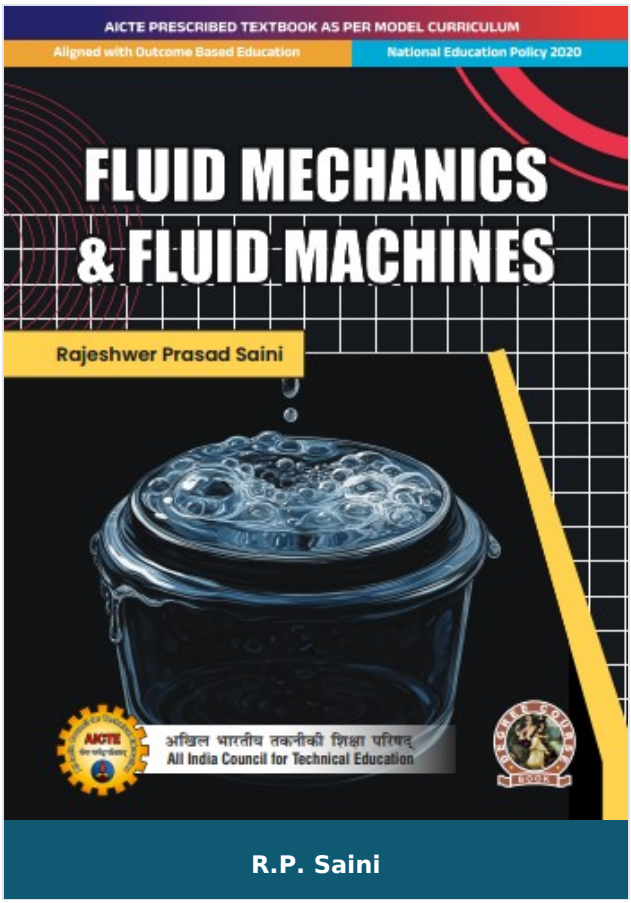
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A. Nag Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.

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Fluid Mechanics & Fluid Machines

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Product Description

Fluid Mechanics & Fluid Machines

This book familiarizes the students to different domains of Fluid Mechanics & Fluid Machines. This covers fundamentals of fluid mechanics, fluid dynamics, dimensional analysis, water turbines and pumps. Main purpose of the book is to help students and researchers to understand and apply the fundamentals to applications in engineering problems. The main content of this book is aligned with the model curriculum of AICTE followed by concept of outcome-based education as per National Education Policy (NEP) 2020.

Salient Features:

- Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes.
- In start of eads unit leaming outcomes are listed to make the student understand what is expected out of him/her after completing that unit.
- Book provides lots of recent information, interesting facts, QR Code for E resources, QR Code for use of ICT, projects, group discussion etc.
- Student and teacher centric subject materials included in book with balanced and chronological manner.
- Figures, tables, and software screen shots are inserted to improve clarity of the topics.
- Apart from essential information a 'Know More' section is also provided in each unit to extend the learning beyond syllabus.
- Short questions, objective questions and long answer exercises are given for practice of students after every chapter.

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- Solved and unsolved problems including numerical examples are solved with systematic steps

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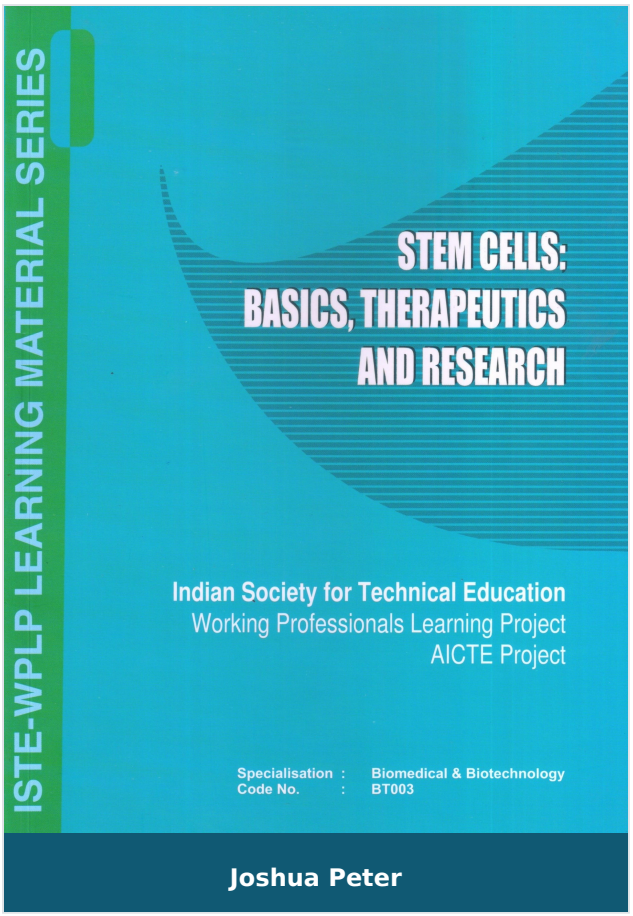
R.P. Saini

Dr. R.P. Saini Department of Hydro and Renewable Energy Indian Institute of Technology Roorkee

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Stem Cells: Basics, Therapeutics and Research

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Product Description

The objective of this book is to provide basic knowledge on types of stem cells, its isolation, and its application in both research and clinical fields, and also to know ethical aspects involved in stem cell culture and application.

Stem cells: Stem Cells are Master cells. There are three kinds of stem Cells: Totipotent (literally al powerful), a newly fertilized egg, Pluripotent (Pluri-Many), an embryo with 50-100 cells, beings to differentiate, Multipotent (Range of Cell Types), obtained from fetal and mature human. This book covers sources, properties of different types of stem cells.

A Clone: There are two types of Cloning, derived from nuclear transfer technology. Therapeutic Clone- Production of replacement of cells and tissues genetically compatible with patient. Reproductive clone-this will will produce genetically identical offspring to one of his or her parents (Dolly the sheep).

Embryonic Stem Cells: These are isolated from inner cell mass (ICM) of the Blastocyst. It proliferates extensively "in-vitro", maintains a normal diploid karyotype over extended culture and differentiates with derivatives of all the three germ layers - ectoderm and mesoderm. Express high levels of Oct 4, a transcription factor specific to ICMs of Blastocyst, show high level of telomerase activity.

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Author

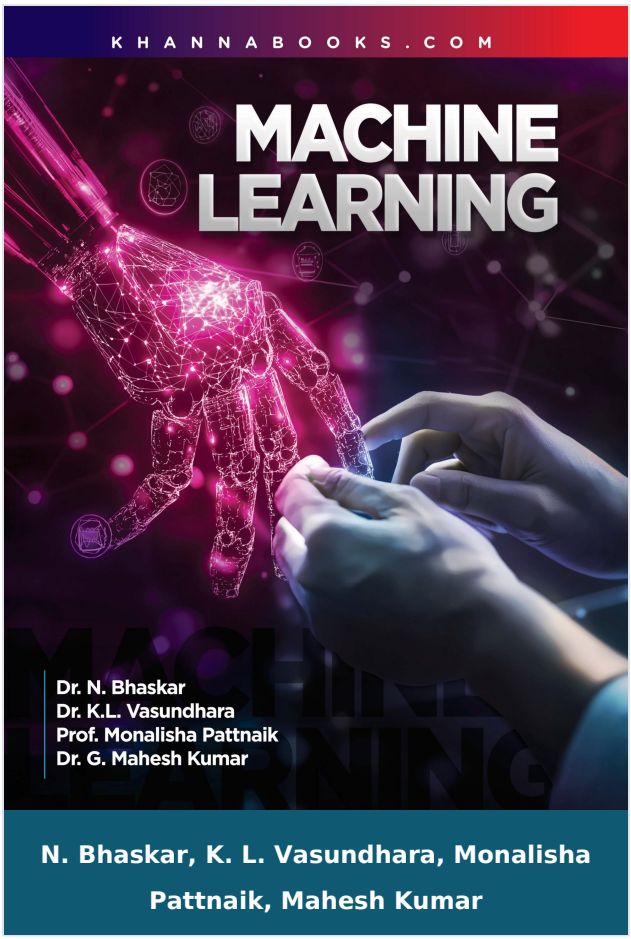
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Machine Learning

Author :	N. Bhaskar, K. L. Vasundhara, Monalisha Pattnaik, Mahesh Kumar
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Product Description

1.To provide Knowledge on Probability distributions.

2. To study the algebra and its uses in solving Eigen value problems and single value decomposition problems.

3. To explain the concepts in number theory.

4. To predict a probability distribution over a set of classes given an observation of input, instead of simply outputting the most likely class to which the observation should belong.

5. The objective of a simple regression course is to teach students the fundamental concepts and techniques of regression analysis, focusing on models with one independent variable.

6. This includes understanding the assumption of regression, interpreting regression coefficients, assessing model fit, making predictions and using regression for inference and hypothesis testing.

7. Support Vector Machine Terminology.

8. Unsupervised Machine Learning and Divisive clustering.

9. EM Algorithm in Machine Learning (Expectation- Maximization).

10. Emphasizes Decision Trees with Pre -Pruning and Post -Pruning Techniques. Showcases Random Forest and its Applications.

11. Explore various types of perceptron and Neural Networks. Details Convolutional Neural Networks with Step- by- step Implementation.

12. Examines Recurrent Neural networks including their Types, Architectures and Applications.

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13. Delves into K -Nearest Neighbors, Learning Locally Weighted Regression Learning and Radio Basis Function.

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Author

N. Bhaskar

Dr. N. Bhasker, Head & Assist. Professor, Dept. of Computer Science take pleasure to express my sincere thanks to my research supervisor Prof. MV Murthy, Former Head and BOS Chairman, Dept. of Mathematics and Computer Science, Osmania University, Hyderabad. It is my immense pleasure to associate with Prof. MV Ramana Murthy and his continuous guidance and task oriented mind setup to complete tis ask very soon. I am also thankful to Bhavan's Vivekananda College of Science Humanities and Commerce, Management, Principle-Dr. GSVRK Choudhary, Mrs. KVB Saraswathi Devi for given me the support and encouraging me to achieve goals successfully. I co-authored books on "Computer Fundamentals", Data Science with Machine Learning using R. Dr. K. L.

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Vasundhara, HOD & Assoc. Professor, Dept. of Mathematics, Thank my Mentor Prof. M. V. Ramana Murthy (Former Head and BOS Chairman, Dept. of Mathematics and Computer Science, OU, Hyderabad) for his guidance, time, ideas and help. I am greatly indebted to Sri Krishna Rao (Correspondent, Stanley College of Engineering and Technology for Women, Hyderabad) for his support. It is imperative on my behalf to remember my behold Mother Late Smt. K. Varalakshmi and my Father-in-Law Late Sri. Yerasuri Gopala Krishna Murthy for their divine blessings. Recipient of "UTTAMA ADYAPIKA AWARD" 2022, " JYSTA ACH ARNA AWARD" 2024 and authored 16 papers in various National & International Journals, Co- authored books on " Engineering Mathematics-IV", "Data Science with Machine Learning using R". AICTE nominated expert for Data Analytics and having 6 Patents. Prf. Monalisha Pattnaik, currently serving as the Head of Department in the Department of Statistics, at Sambalpur University holds her D.Litt. in Supply Chain Management from Sambalpur University and her Ph.D. in Operations Research from Utkal University. Additionally, she holds the position of Deputy Director of the Research and Development Cell, at Sambalpur University. Apart from that, she actively conducts training programs, and seminars, and delivers talks at Faculty Development Programmes conducted by HRDC. In association with the mentioned, she is an avid researcher and has devoted her time to urging young minds into research. Her dedication to research in evident from her extensive list of publications in reputed international and national journals. Prof. Pattnaik boasts an impressive publication record with over 50 papers indexed in SCOPUS and WoS. In addition to her articles, Prof. Pattnaik as authored eight books, edited five books of international repute, and contributed numerous book chapters, solidifying her expertise in her fields of interest. As a highly regarded reviewer for prestigious publishers such as Elslevier, Taylor & Fracies, IEEE Access, and Springer, she actively conrtibutes to the academic community. She has an active role to play as a Member of the Editorial Board of reputed international journals. She is also associated with independent projects conducted by both Govt. of India and Govt. of Odisha. Presently, she is associated with Sambalpur University funded project bases on Predictive

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Analytics. In her 16 years of teaching experience, she has covered topics such as Artificial Intelligence, Bibliometrics, Advanced Operations Research, Financial Security Analysis, Co-integration, ARIMA Modelling, Production and Operations Management, Security Analysis and Portfolio Management, Logistics and Supply Chain Management, Optimization Techniques, Research Methodology, and Advanced Multivariate Analysis. Her name has been included as an active reviewer in the online library of reputed international journals such as British Academy of Management and John Wilely & Sons Ltd. One of her article published in the journal Statistics Optimization and Information Computing has been included in the CAM-Digest Magazine, China. She has been getting invitation for conducting track chair session of international conferences in South Korea, Bangkok and France(Online). Recently, she has development a new algorithm of Transportation Problem and it is published in a reputed journal of Log Forum, Poland. She has published a case study which is available online in an academic website " studymode.com". Very recently, she has published three preprints on COVID-19 in the medRxiv org. USA, the preprint server health sciences, world reputed free online archive and distribution server for complete but preprints in the medical, clinical, and related health sciences. With a notable number of citations, an h-index of 14, and an i10-index of 26 from 2018 until the present, Prof. Pattnaik continues to be a prominent figure in the academic and research world, contributing her vast experience. Her work was acknowledged in the AD Scientific Index 2024, a prestigious "JYESTA ACHARYA AWARD"2021-2022, All India Level on 4th Dec organized by "Bharat Education Excellence Awards-2022" team of Skill, Swadesh, LACE, Brainovision, Cito Health Care & Lions Club, Hyderabad. She has also the recipient of the "Distinguished Woman Researcher in Operations Research", (OPERATIONS RESEARCH -2024 (Management)) by Venus International Women Award: Chennai, Tamil Nadu, India. Dr. G Mahesh Kumar holds the position of Assistant Professor, Department of Computer Science, Bhavan's Vivekananda College of Science, Humanities and Commerce, Sainikpuri, Secunderabad, Telangana, India. He has done his Ph.D. in Computer Science & Engineering from JNTU Hyderabad. He

has done his Masters in Information Systems, M. Tech (CSE) from Osmania University. He has qualified UGC-NET in Computer Applications. He has presented papers in national and international conference. He has published research papers international and national journals. He has published one patent. His research areas include Grid Computing, Cloud Computing, Internet of Things, Blockchain Technology, and Machine Learning.

K. L. Vasundhara

Dr. N. Bhasker, Head & Assist. Professor, Dept. of Computer Science take pleasure to express my sincere thanks to my research supervisor Prof. MV Murthy, Former Head and BOS Chairman, Dept. of Mathematics and Computer Science, Osmania University, Hyderabad. It is my immense pleasure to associate with Prof. MV Ramana Murthy and his continuous guidance and task oriented mind setup to complete tis ask very soon. I am also thankful to Bhavan's Vivekananda College of Science Humanities and Commerce, Management, Principle-Dr. GSVRK Choudhary, Mrs. KVB Saraswathi Devi for given me the support and encouraging me to achieve goals successfully. I co-authored books on "Computer Fundamentals", Data Science with Machine Learning using R. Dr. K. L. Vasundhara, HOD & Assoc. Professor, Dept. of Mathematics, Thank my Mentor Prof. M. V. Ramana Murthy (Former Head and BOS Chairman, Dept. of Mathematics and Computer Science, OU, Hyderabad) for his guidance, time, ideas and help. I am greatly indebted to Sri Krishna Rao (Correspondent, Stanley College of Engineering and Technology for Women, Hyderabad) for his support. It is imperative on my behalf to remember my behold Mother Late Smt. K. Varalakshmi and my Father-in-Law Late Sri. Yerasuri Gopala Krishna Murthy for their divine blessings. Recipient of "UTTAMA ADYAPIKA AWARD" 2022, " JYSTA ACH ARNA AWARD" 2024 and authored 16 papers in various National & International Journals, Co- authored books on " Engineering Mathematics-IV", "Data Science with Machine Learning using R". AICTE nominated expert for Data Analytics and having 6 Patents. Prf. Monalisha Pattnaik, currently serving as the Head of Department in the Department of Statistics, at Sambalpur University holds her D.Litt. in Supply Chain

Management from Sambalpur University and her Ph.D. in Operations Research from Utkal University. Additionally, she holds the position of Deputy Director of the Research and Development Cell, at Sambalpur University. Apart from that, she actively conducts training programs, and seminars, and delivers talks at Faculty Development Programmes conducted by HRDC. In association with the mentioned, she is an avid researcher and has devoted her time to urging young minds into research. Her dedication to research in evident from her extensive list of publications in reputed international and national journals. Prof. Pattnaik boasts an impressive publication record with over 50 papers indexed in SCOPUS and WoS. In addition to her articles, Prof. Pattnaik as authored eight books, edited five books of international repute, and contributed numerous book chapters, solidifying her expertise in her fields of interest. As a highly regarded reviewer for prestigious publishers such as Elslevier, Taylor & Fracies, IEEE Access, and Springer, she actively conrtibutes to the academic community. She has an active role to play as a Member of the Editorial Board of reputed international journals. She is also associated with independent projects conducted by both Govt. of India and Govt. of Odisha. Presently, she is associated with Sambalpur University funded project bases on Predictive Analytics. In her 16 years of teaching experience, she has covered topics such as Artificial Intelligence, Bibliometrics, Advanced Operations Research, Financial Security Analysis, Co-integration, ARIMA Modelling, Production and Operations Management, Security Analysis and Portfolio Management, Logistics and Supply Chain Management, Optimization Techniques, Research Methodology, and Advanced Multivariate Analysis. Her name has been included as an active reviewer in the online library of reputed international journals such as British Academy of Management and John Wilely & Sons Ltd. One of her article published in the journal Statistics Optimization and Information Computing has been included in the CAM-Digest Magazine, China. She has been getting invitation for conducting track chair session of international conferences in South Korea, Bangkok and France(Online). Recently, she has development a new algorithm of Transportation Problem and it is published in a reputed journal of Log Forum, Poland. She

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Monalisha Pattnaik

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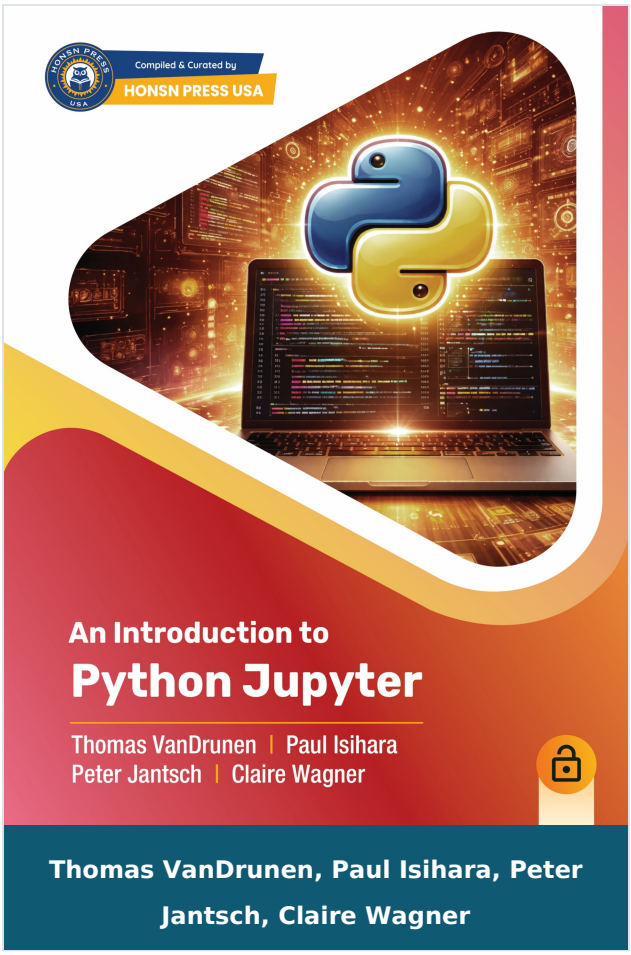
Mahesh Kumar

Mahesh Kumar holds the position of Assistant Professor, Department of Computer Science, Bhavan's Vivekananda College of Science, Humanities and Commerce, Sainikpuri, Secunderabad, Telangana, India. He has done his Ph.D. in Computer Science & Engineering from JNTU Hyderabad. He has done his Masters in Information Systems, M. Tech (CSE) from Osmania University. He has qualified UGC-NET in Computer Applications. He has presented papers in national and international conference. He has published research papers international and national journals. He has published one patent. His research areas include Grid Computing, Cloud Computing, Internet of Things, Blockchain Technology, and Machine Learning.

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An Introduction to Python Jupyter (HONSN PRESS USA)

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Product Description

An Introduction to Python Jupyter Notebooks for College Math Teachers” is a comprehensive and evolving classroom resource designed to bridge the gap between theoretical collegiate mathematics and practical computational application. This text serves as an essential guide for college math teachers and their students seeking to seamlessly integrate the power of Python and Jupyter Notebooks (JNBs) into their curriculum. Unlike traditional textbooks, this entire work is presented in the form of modular Jupyter Notebooks, with each section structured for interactive engagement. This format allows for the direct input and execution of Python code alongside explanatory text, charts, and multimedia resources, making mathematical concepts immediately demonstrable and reproducible.

The book’s core theme is to enrich and enliven the study of mathematics using this cutting-edge tool. It offers immense practical value by covering a wide range of collegiate mathematics, from foundational Python programming and Exploratory Data Analysis (EDA) to advanced topics in Calculus, Linear Algebra, Statistical Inference, Differential Equations, and Complex Variables. Crucially, it connects these abstract concepts to complex real-world societal applications, such as modeling disease spread (COVID-19), analyzing urban data, and groundwater flow. Each chapter is designed to be read independently and includes dedicated JNB labs with solutions, providing a flexible framework for experienced educators to modify and tailor content to their specific courses, ultimately serving as a useful starting point to harness computational power for mathematical education.

Salient Features

- Interactive Learning Format: The entire book is written as modular Jupyter Notebooks, allowing for immediate, interactive execution of code alongside

explanatory content, which is ideal for classroom use.

- Comprehensive Curricula Integration: The content seamlessly integrates Python programming with core college mathematics, including Calculus, Linear Algebra, Probability, and Statistical Inference for multiple course levels.
- Foundational Coding Guide: Provides a detailed Python Programming Guide, introducing essential concepts like data types, control flow, functions, and working with libraries such as NumPy and Pandas.
- Applied Data Science: Dedicated chapters on Exploratory Data Analysis (EDA) and Advanced Data Analysis provide hands-on experience in real-world data investigation and text classification using Python.
- Societal Modeling Applications: Features extensive application-based chapters, such as using Differential Equations to model public health issues (e.g., COVID-19) and Complex Variables for groundwater analysis.
- Practical Lab Exercises: Every chapter includes a dedicated Jupyter Notebook Lab and corresponding solutions, offering practical exercises that teachers can customize and students can use for independent practice.
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Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Author

Thomas VanDrunen

Thomas VanDrunen

Paul Isihara

Paul Isihara

Peter Jantsch

Peter Jantsch

Claire Wagner

Claire Wagner

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