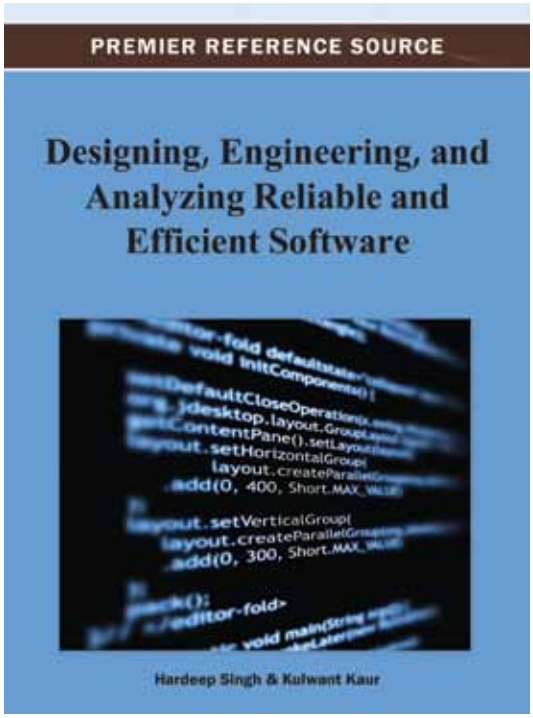
An Excellent Addition to Your Library!

Released: February 2013



ISBN: 9781466629585; © 2013; 352 pp.
Print: US $195.00 | Perpetual: US $295.00 | Print + Perpetual: US $390.00

Pre-pub Discount:*
Print: US $185.00 | Perpetual: US $280.00
* Pre-pub price is good through one month after publication date.

Designing, Engineering, and Analyzing Reliable and Efficient Software

Hardeep Singh (Guru Nanak Dev University, India) and
Kulwant Kaur (Apeejay Institute of Management,India)

Due to the role of software systems in safety-critical applications and in the satisfaction of customers and organizations, the development of efficient software engineering is essential.

Designing, Engineering, and Analyzing Reliable and Efficient Software discusses and analyzes various designs, systems, and advancements in software engineering. With its coverage on the integration of mathematics, computer science, and practices in engineering, this book highlights the importance of ensuring and maintaining reliable software and is an essential resource for practitioners, professors and students in these fields of study.

Topics Covered:

- Agent Oriented Software Engineering
- Architectural Analysis
- Automated Software Design
- Productivity Improvement
- Project Management
- Software & Systems Design
- Systems & Software Engineering

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Hardeep Singh is presently Professor, Department of Computer Science and Engineering; Director, Placement Cell and Dean, Alumni Guru Nanak Dev University, Amritsar. Having throughout first class academic career, Dr Singh is an M.S. (Software Systems) from Birla Institute of Technology and Science (BITS), Pilani and has received his Ph. D from Guru Nanak Dev University, Amritsar, India. His career spans more than two decades' of research, research guidance at doctoral, M.Tech., MCA & B.Tech and university teaching in field of Computer Science and Engineering. During his this professional career, he has also been visiting faculty to different universities, institutes and corporate, apart from associating as member of UGC teams, AICTE panels, governing boards of various educational institutions and member of academic bodies like Board of Studies, R.D.C.s and Academic Councils of different universities viz. H.P. University, Shimla; Kurukshetra University, Kurukshetra; Punjab Technical University, Jalandhar; HNB Gharwal University,Srinagar,Uttrakhand; Panjab University, Chandigarh; etc. An active researcher and a prolific writer, Dr. Singh has authored five books and has contributed around 100 papers to several journals. He is also an active member many of Professional Societies like he is Fellow, British Computer Society (FBCS); Member, Association for Computing Machinery (ACM); Member, International Association of Engineers (IAENG); Global Member, Internet Society; Life Member, Punjab Science Congress and Computer Society of India etc. He is a frequent reviewer, discussant, and session chair for several seminars and conferences.

IGI GLOBAL
DISSEMINATOR OF KNOWLEDGE
www.igi-global.com

Publishing Academic Excellence
at the Pace of Technology Since 1988

Section 1: Advanced Software Engineering

Chapter 1
Change Management in Shared Software Specifications
Taibi Fathi (University of Management and Technology, Malaysia)

Chapter 2
Component Certification Process and Standards
Kaur Parminder (Guru Nanak Dev University, India)
Singh Hardeep (Guru Nanak Dev University, India)

Chapter 3
Analyzing Growth Trends of Reusable Software Components
Kaur Kuljit (Guru Nanak Dev University, India)

Chapter 4
Aspect-Oriented Recommender Systems
Bedi Punam (University of Delhi, India)
Agarwal Sumit Kr (University of Delhi, India)

Section 2: Systems Analysis, Software Design, and Design Patterns

Chapter 5
Design of Semi-Structured Database System:
Sarkar Anirban (National Institute of Technology, Durgapur, India)

Chapter 6
A Comparative Study of Bayesian and Fuzzy Inference Approach to Assess Quality of the Software Using Activity-Based Quality Model
Jeet Kawal (D A V College, India)
Bhatia Nitin (D A V College, India)
Dhir Renu (Dr. B R Ambedkar National Institute of Technology, India)

Chapter 7
Data Mining Techniques for Software Quality Prediction
Mishra Bharavi (Indian Institute of Technology (BHU), India)
Shukla K. K. (Indian Institute of Technology (BHU), India)

Chapter 8
Quality Assurance of Website Structure
Sreedhar G. (Rashtriya Sanskrit Vidyapeetha (Deemed University), India)

Chapter 9
Resolving Conflict in Code Refactoring
Kaur Lakhwinder (Apeejay Institute of Management Technical Campus, India)
Kaur Kuljit (Guru Nanak Dev University, India)
Gupta Ashu (Apeejay Institute of Management Technical Campus, India)

Section 3: Advancements in Engineering of Systems

Chapter 10
Towards Test-Driven and Architecture Model-Based Security and Resilience Engineering
Saidane Ayda (University of Luxembourg, Luxembourg)
Guelfi Nicolas (University of Luxembourg, Luxembourg)

Chapter 11
Software Engineering, Process Improvement, and Experience Management:
Sharma Neeraj (Punjabi University, India)
Singh Kawaljeet (Punjabi University, India)
Goyal D.P. (Management Development Institute, India)

Chapter 12
Usability Engineering Methods and Tools
Kaur Amandeep (Apeejay Institute of Management Technical Campus, India)

Chapter 13
Innovative Strategies for Secure Software Development
Bedi Punam (University of Delhi, India)
Gandotra Vandana (University of Delhi, India)
Singhal Archana (University of Delhi, India)

Section 4: Case Studies and Emerging Technologies

Chapter 14
Case Study:
Kaur Daljit (Lyallpur Khalsa College, India)
Kaur Parminder (Guru Nanak Dev University, India)

Chapter 15
Galileo Case Study:
Liapis Aggelos (European Dynamics SA, Greece)
Argyzoudis Evangelos (European Dynamics SA, Greece)

Chapter 16
Case Study:
Ratti Nisha (Rayat Institute of Engineering and Technology, India)
Kaur Parminder (Guru Nanak Dev University, India)

Order Your Copy Today!

Name: _____

Organization: _____

Address: _____

City, State, Zip: _____

Country: _____

Tel: _____

Fax: _____

E-mail: _____

☐ Enclosed is check payable to IGI Global in US Dollars, drawn on a US-based bank

☐ Credit Card ☐ Mastercard ☐ Visa ☐ Am. Express

3 or 4 Digit Security Code: _____

Name on Card: _____

Account #: _____

Expiration Date: _____