The Greening of IT: How Companies Can Make a Difference for the Environment, John Lamb. The author presents the business case for enterprises to improve the environmental performance of their IT organizations, covering every major issue companies will face along the way, including internal organization, regulations, energy cost shifts, and utility-rate incentives. The author also provides business-focused and practical information, including discussion of new products, services, and best practices for reducing data-center energy consumption, and offers guidance on everything from measuring energy usage and optimizing data-center energy use to virtualization.

IBM Press; www.ibmpressbooks.com; 0-13-715083-0, 352 pp.

Practical Design Verification, Dhiraj K. Pradhan and Ian G. Harris. This practical guide to formal and simulation-based functional verification promises to improve design efficiency and reduce costs. Offering a theoretical and practical understanding of the key issues involved, the authors explain both formal and simulation-based techniques.

Readers gain insights into practical issues, including hardware verification languages (HVLs) and system-level debugging. The foundations of formal and simulation-based techniques are covered, as are more recent research advances, including transaction-level modeling and assertion-based verification, plus the theoretical underpinnings of verification, including the use of decision diagrams and Boolean satisfiability (SAT).


Probability, Markov Chains, Queues, and Simulation, William J. Stewart. This book provides a modern treatment of the mathematical processes underlying performance modeling. The detailed explanations of mathematical derivations and the numerous illustrative examples make this textbook readily accessible to graduate and advanced undergraduate students taking courses in which stochastic processes play a fundamental role. This textbook is relevant to a wide variety of fields, including computer science, engineering, operations research, statistics, and mathematics.

Each chapter of the textbook concludes with an extensive set of exercises. An instructor’s solution manual, in which all exercises are completely worked out, is also available to professors.


Search User Interfaces, Marti A. Hearst. This book focuses on the human users of search engines and the tool they use to interact with them: the search user interface. The truly worldwide reach of the Web has brought with it a new realization among computer scientists and laypeople of the enormous importance of usability and user interface design. In the past 10 years, much has become understood about what works in search interfaces from a usability perspective and what does not. Researcher and practitioners have developed a wide range of innovative interface ideas, but only the most broadly acceptable make their way into major Web search engines. This book summarizes these developments, presenting the state of the art of search interface design, both in academic research and in deployment in commercial systems. Many books describe the algorithms behind search engines and information retrieval systems, but the unique focus of this book is specifically on the user interface. It will be welcomed by industry professionals who design systems that use search interfaces as well as graduate students and academic researchers who investigate information systems.

Cambridge University Press; www.cambridge.org; 978-0-521-11379-3; 404 pp.

Lean-Agile Software Development: A Achieving Enterprise Agility, Alan Shalloway, Guy Beaver, and James R. Trott. Agile techniques have demonstrated immense potential for developing more effective, higher-quality software. However, scaling these techniques to the enterprise presents many challenges. The solution is to integrate the principles and practices of Lean software development with Agile’s ideology and methods. By doing so, software organizations can dramatically improve both developer productivity and the software’s business value. This book’s three expert Lean software consultants draw from their experience to gather the insights, knowledge, and new skills developers need to succeed with Lean-Agile development.

A combined Lean-Agile approach can dramatically improve both developer productivity and the software’s business value. This book’s three expert Lean software consultants draw from their experience to gather the insights, knowledge, and new skills developers need to succeed with Lean-Agile development.

This book shows how to transition to Lean software development quickly and successfully, manage the initiation of product enhancements, and help project managers work together to manage product portfolios more effectively.

Addison-Wesley Professional; www.informit.com; 0-321-53289-9; 304 pp.

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