Quantum Computing for Computer Scientists, Noson S. Yanofsky and Mirco A. Mannucci. The multidisciplinary field of quantum computing strives to exploit some of the uncanny aspects of quantum mechanics to expand our computational horizons. This book takes readers on a tour of this cutting-edge research. The authors employ ideas and techniques familiar to students of computer science and do not expect the reader to have an advanced mathematics or physics background.

After presenting the necessary prerequisites, the material explores different aspects of quantum computing from the specific standpoint of computer science, including chapters on computer architecture, algorithms, programming languages, theoretical computer science, cryptography, information theory, and hardware. The text provides step-by-step examples, more than 200 exercises with solutions, and programming drills that bring the ideas of quantum computing alive for today’s computer science students and researchers.


Software Testing and Quality Assurance: Theory and Practice, Kshirasagar Naik and Priyadarshi Tripathy. This primer on software testing and quality assurance—from integration to execution and automation—fills the need for a user-friendly text that aims to inform software engineers, software quality professionals, software developers, and students about fundamental developments in testing theory and common testing practices.

Balancing theory with practice, and complemented with an abundance of pedagogical tools, including test questions, examples, teaching suggestions, and chapter summaries, this book offers a self-contained tool for professionals and an ideal introductory text for courses in software testing, quality assurance, and software engineering.


Applied Security Visualization, Raffael Marty. As networks become ever more complex, securing them becomes increasingly difficult. Visualization provides a solution. Using today’s state-of-the-art data visualization techniques, readers can gain a deeper understanding of what’s happening on their network right now, uncovering hidden data patterns, identifying emerging vulnerabilities and attacks, and responding decisively with countermeasures far more likely to succeed than conventional methods.

This book introduces the concepts, techniques, and tools readers need to use visualization on their networks. It covers identifying and utilizing the right data sources and transforming data into visuals that reveal the most important information. The book also shows how to use visualization to perform broad network security analyses, assess specific threats, and even improve business compliance.

The accompanying CD contains a copy of Data Analysis and Visualization Linux. DAVIX offers powerful tools for visualizing networks and assessing security. The program runs directly from the CD-ROM, without installation.

Addison-Wesley Professional; www.informit.com; 0-13-613517-X; 848 pp.

Pro Spring 2.5, Jan Machacek, Aleksa Vukotic, Anirvan Chakraborty, and Jessica Ditt. This book covers the new features of Spring 2.5, focusing on the best practices and core standards of contemporary Spring development. As members of the Spring development team at Cake Solutions, this team brings extensive practical experience gained from working with Spring since version 1.0 and delivering successful systems on top of it.

Readers can learn the approaches that really matter in a professional, enterprise-level environment, and apply them to projects today, safe in the knowledge that they just work.


Send book announcements to newbooks@computer.org.