Security in Wireless Ad Hoc and Sensor Networks, Erdal Cayirci and Chunming Rong. This book introduces the fundamentals of wireless ad hoc networking, with an emphasis on security. The authors discuss denial-of-service attacks, wireless ad hoc and sensor networks, routing, cryptographic primitives, and electronic warfare as well as various challenges in the field, including bootstrapping, key distribution and exchange, authentication, privacy, anonymity, and tamper resilience.

This book is suited for graduate students in computer, electrical, and communications engineering and computer science; researchers in academia and industry; C4I engineers and officers in the military; wireless network designers for Internet service providers; and mobile communications operators.


Programming Language Pragmatics, 3rd ed., Michael L. Scott. This comprehensive programming language textbook takes the perspective that language design and implementation are tightly interconnected, and neither can be fully understood in isolation. This edition covers the most recent developments in programming language design. With a new chapter on runtime program management and expanded coverage of concurrency, this book provides both students and professionals with a solid understanding of the most important issues driving software development today.

Morgan Kaufmann; www.elsevierdirect.com; 978-0-123-74514-9; 944 pp.

Bioinformatics: Problem Solving Paradigms, Volker Sperschneider. Bioinformatics continuously employs several fundamental principles for problem analysis and algorithm design. This book offers a clear explanation of these principles, presenting them in a self-contained, mathematically precise manner, with case studies in sequencing and mapping, string storage and manipulation, pattern matching, alignment, gene identification, genome rearrangement, structure prediction, regulatory networks, and pseudoknot detection. The book closes with a thorough bibliography, ranging from classic research results to recent findings, and provides tips for future research.

This book is suited for mathematicians, computer scientists, and students and practitioners in bioinformatics.

Springer; www.springer.com; 978-3-540-78505-7; 290 pp.

The Handbook of Information and Computer Ethics, Kenneth E. Himm and Herman T. Tavani, eds. This handbook provides an accessible overview of the most important issues in information and computer ethics. It covers methodological frameworks; theoretical issues affecting property, privacy, anonymity, and security; professional issues and information-related professions; responsibility issues and risk assessment; regulatory challenges; and access and equity issues. Each chapter explains and evaluates the central positions and arguments on the respective issues and ends with a bibliography that identifies important supplements available on the topic.


Digital Diaspora: A Race for Cyberspace, Anna Everett. Deftly interweaving history, culture, and critical theory, the author traces the rise of black participation in cyberspace, particularly during the early years of the Internet. She challenges the problematic historical view of black people as quintessential information-age outsiders and repositions them as eager technology adopters and consumers, participating as constituent elements in the information technology revolution. She offers several case studies, including the Association of Nigerians Living Abroad’s Niajanet virtual community, the grassroots organizing efforts leading to the Million Woman March, the migration of several historic black presses online, and an interventionist critique of race in contemporary videogames.


The Elements of Computing Systems: Building a Modern Computer from First Principles, Noam Nisan and Shimon Schocken. In the early days of computer science, the interactions of hardware, software, compilers, and the operating system were simple enough to see an overall picture of how a computer worked. With the increasing complexity of computer technology and the resulting specialization of knowledge, such clarity is often lost. Unlike other texts that cover only one aspect of the field, this book gives readers an integrated picture of applied computer science as it comes into play in the construction of a simple yet powerful computer system.