

**D**igital Design of Nature: Computer Generated Plants and Organics, Oliver Deussen and Bernd Lintermann. The reproduction of nature via computer has fascinated computer graphics scientists and artists ever since synthetic imaging became possible. This book explains several methods for creating artificial plant models and applying them within areas such as simulation, virtual reality, botany, landscaping, and architecture. These models can be combined to create gardens, parks, and even entire landscapes.

The range of representational-form creation reaches from deceptively authentic-looking pictures to abstract presentations. In addition, with similar methods, organic objects can be produced, changed, and animated.

Computer scientists, media designers, video game developers, architects, biologists, and landscape designers might all find this book useful.

Springer; www.springeronline.com; 3-540-40591-7; 295 pp.; \$59.95.

**C**ross-Platform Game Programming, Steven Goodwin. With many of today's games being released simultaneously on all platforms, a good cross-platform development strategy is essential. This book explains the plethora of problems that exist within every cross-platform game and provides help solving them. It also teaches readers how to write code that behaves identically across all machines.

The author explains why standard libraries are not standard enough, covering the nuances between compilers, debuggers, and operating systems. Guidelines appear throughout the book, showing readers how to use the same code to handle different hardware specifications without change for ported games or for those being built to work cross-platform from the ground up. Because this book teaches the methods, not the API, it scales well for future platforms and empowers readers to create their own designs.



Charles River Media; www.charlesriver.com; 1-58450-379-3; 460 pp.; \$49.95.

**D**igital Signal Processing Fundamentals, Ashfaq A. Khan. DSP is the processing of signals using digital computers. These signals might be anything transferred from an analog domain to a digital form. As a result, understanding the spectrum of DSP technology can be a daunting task for electrical engineering professionals and students alike.

The book provides a comprehensive look at DSP by introducing the important mathematical processes and then providing several application-specific tutorials that use examples for solving practical engineering problems. The book also includes a CD-ROM with the source code for the projects plus Matlab and Scilab scripts that generate graphs.

Da Vinci Engineering Press/Charles River Media; www.charlesriver.com; 1-58450-281-9; 460 pp.; \$49.95.

**M**obile Wireless Communications, Mischa Schwartz. Wireless communication has become a ubiquitous part of modern life, from global cellular telephone systems to local and even personal area networks. This book provides a tutorial introduction to digital mobile wireless networks, describing theoretical underpinnings with a wide range of real-world examples.

The book begins with a review of propagation phenomena, then examines channel allocation, modulation techniques, multiple access schemes, and coding techniques. The author reviews GSM and IS-95 systems and

describes 2.5G and 3G packet-switched systems in detail. Performance analysis and accessing and scheduling techniques also receive coverage, then the book closes with a chapter on wireless LANs and personal area networks.

This book provides an accessible introduction to the theory and practice of modern wireless networks and contains many worked examples and homework exercises.

Cambridge University Press; www.cambridge.org; 0-521-84347-2; 470 pp.; \$75.00.

**P**rotect Your Intellectual Property Rights, Howard B. Rockman. This text can be useful for clients to read before meeting with attorneys so they can understand the fundamentals of patent, copyright, trade secret, trademark, mask work, and unfair competition laws.

This is not a "do-it-yourself" manual but rather a ready reference tool for inventors or creators that will help generate maximum efficiencies in obtaining, preserving, and enforcing their intellectual property rights. It explains why they need to secure the services of IPR attorneys.

Coverage includes employment contracts, including the ability of engineers to take confidential and secret knowledge to a new job; shop rights and information to help entrepreneurs establish a nonconflicting enterprise when leaving their prior employment; sample forms for contracts, contract clauses, and points to consider before signing employment agreements; and coverage of copyright, software protection, and the Digital Millennium Copyright Act.

IEEE Press/Wiley-Interscience; wiley.com; 0-471-44998-9; 544 pp.; \$79.95.

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