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and their management for DSL design studies. 9. Simulation techniques for the QAM (2D) code. 10. Computer based optimization techniques for HDSL design. Part IV. System performance from very low to very high rates. 11. Data up to PRISDN rates. 12. Data at PRISDN rate. 13. Performance of trellis coding. 14. Digital subscriber line (HDSL and ADSL) capacity. Part V. Recent high-speed network environments. 15. Knowledge highways. 16. Impact of fiber optic technology. 17. Optical lightwave systems in existing networks. 18. A PC based fiber optic CAD environment. Glossary. Index. Author's biographies.

<u>Web Security & Commerce.</u> By Simson Garfinkel. O'Reilly, Sebastopol, CA. (1997). 483 pages. \$32.95. Contents:

Preface. I. Introduction. 1. The web security landscape. II. User safety. 2. The buggy browser: Evolution of risk. 3. Java and JavaScript. 4. Downloading machine code with ActiveX and plug-ins. 5. Privacy. III. Digital certificates. 6. Digital identification techniques. 7. Certification authorities and server certificates. 8. Client-side digital certificates. 9. Code signing and Microsoft's Authenticode. IV. Cryptography. 10. Cryptography basics. 11. Cryptography and the Web. 12. Understanding SSL and TLS. V. Web server security. 13. Host and site security. 14. Controlling access to your web server. 15. Secure CGI/API programming. VI. Commerce and society. 16. Digital payments. 17. Blocking software and censorship technology. 18. Legal issues: Civil. 19. Legal issues: Criminal. VII. Appendixes. A. Lessons from Vineyard.NET. B. Creating and installing web server certificates. C. The SSL 3.0 protocol. D. The PICS specification. E. References. Index.

<u>The Joy of C</u>, (Third edition). By Lawrence H. Miller and Alexander E. Quilici. John Wiley & Sons, New York. (1997). 788 pages. \$58.95 (diskette included). Contents:

Preface. I. A gentle introduction to C. 1. Getting started with C. 2. Getting comfortable with C. 3. An introduction to functions. II. The basics. 4. Numbers. 5. Characters. 6. Operators. 7. Statements. 8. Arrays. 9. Program structure. III. Advanced data types. 10. Pointers. 11. Strings. 12. Constructed types. 13. Arrays of arrays. 14. Arrays of pointers. IV. Advanced program structure. 15. The preprocessor. 16. Functions revisited. 17. Generic functions. 18. Complex declarations. V. C and the real world. 19. External files. 20. Lists and trees. 21. Portability. VI. Moving from C to C++. 22. C++ basics. 23. Encapsulation with classes. 24. Inheritance. Appendices. A. Library details. B. Character sets. Index.

Windows NT in a Nutshell: A Desktop Quick Reference for System Administrators. By Eric Pearce. O'Reilly, Sebastopol, CA. (1997). 348 pages. \$19.95.

Contents:

Preface. 1. Using Windows NT. 2. The control panel. 3. Administrative tools. 4. Accessories. 5. RAS and DUN. 6. Using the command line. 7. Uncommon sense. Appendices. A. NetBIOS. B. TCP/IP. C. Server versus workstation. D. NT resources. Glossary. Task index. Index.

<u>Slaves of the Machine: The Quickening of Computer Technology</u>. By Gregory J. E. Rawlins. MIT Press, Cambridge, MA. (1997). 135 pages. \$25.00. Contents:

Preface. 1. A strange new machine. 2. The greed for speed. 3. Precisely speaking. 4. The subjunctive mood. 5. Limits to growth. 6. Thinking about thinking. My thanks. Index.

<u>Metamathematics, Machines, and Gödel's Proof.</u> By N. Shankar. Cambridge University Press, New York. (1994). 202 pages. \$39.95 (hardback), \$24.95 (paperback). Contents:

Preface. 1. Introduction. 2. The statement of the incompleteness theorem. 3. Derived inference rules. 4. The representability of the metatheory. 5. The undecidable sentence. 6. A mechanical proof of the Church-Rosser theorem. 7. Conclusions. Bibliography.

<u>Numerica: A Modeling Language for Global Optimization</u>. By Pascal Van Hentenryck, Laurent Michel and Yves Deville. MIT Press, Cambridge, MA. (1997). 210 pages. \$25.00. Contents:

List of tables. List of figures. List of statements. Preface. 1. Introduction. 2. A tour of Numerica. 3. The meaning of Numerica. 4. Modeling in Numerica. 5. The syntax of Numerica. 6. The semantics of Numerica. 7. An implementation of Numerica. 8. Experimental results. Appendices. 1. Syntax of Numerica. 2. Benchmarks. Bibliography. Index.

<u>Pattern Matching Algorithms</u>. Edited by Alberto Apostolico and Zvi Galil. Oxford University Press, New York. (1997). 377 pages. \$65.00. Contents:

1. Off-line serial exact string searching (M. Crochemore). 2. Off-line parallel exact string searching (Z. Galil and I. Yudkiewicz). 3. On-line string searching (A. Apostolico). 4. Serial computations of Levenshtein distances