

*Meromorphic Functions and Projective Curves.* By Kichoon Yang. Kluwer Academic Publishers, Dordrecht. (1999). 201 pages. \$105.00, NLG 175.00, GBP 62.00.

Contents:

Preface. 1. Foundational material. 2. Analytic and algebraic families. 3. Meromorphic functions. 4. Brill-Noether theory. 5. Projective differential geometry. 6. Metric geometry of curves. Bibliography. Index.

*Formal Semantics and Proof Techniques for Optimizing VHDL Models.* By Kothanda Umamageswaran, Sheentanshu L. Pandey and Philip A. Wilsey. Kluwer Academic Publishers, Boston, MA. (1999). 158 pages. \$105.00, NLG 240.00, GBP 72.00.

Contents:

List of figures. List of tables. Preface. Acknowledgments. 1. Introduction. 2. Related work. 3. The static model. 4. A well-formed VHDL model. 5. The reduction algebra. 6. Completeness of the reduced form. 7. Interval temporal logic. 8. The dynamic model. 9. Applications of the dynamic model. 10. A framework for proving equivalences using PVS. 11. Conclusions. Appendices. A.1. The relation  $\text{during}(b, a)$  holds. A.2. The relation  $\text{finishes}(b, a)$  holds. A.3. The relation  $\text{overlaps}(a, b)$ . References. Index.

*Domains and Lambda-Calculi.* By Roberto M. Amadio and Pierre-Louis Curien. Cambridge University Press, Cambridge. (1998). 484 pages. \$74.95.

Contents:

Preface. Notation. 1. Continuity and computability. 2. Syntactic theory of the  $\lambda$ -calculus. 3.  $D_\infty$  models and intersection types. 4. Interpretation of  $\lambda$ -calculi in CCC's. 5. CCC's of algebraic dcpo's. 6. The language PCF. 7. Domain equations. 8. Values and computations. 9. Powerdomains. 10. Stone duality. 11. Dependent and second order types. 12. Stability. 13. Towards linear logic. 14. Sequentiality. 15. Domains and realizability. 16. Functions and processes. Appendices. 1. Summary of recursion theory. 2. Summary of category theory. References and bibliography. Index.

*MySQL and mSQL.* By Randy Jay Yarger, George Reese and Tim King. O'Reilly, Sebastopol, CA. (1999). 487 pages. \$34.95.

Contents:

Preface. I. Getting started with MySQL and mSQL. 1. Introduction to relational databases. 2. Database design. 3. Installation. 4. MySQL. 5. mSQL. 6. SQL according to MySQL and mSQL. 7. Other mid-range database engines. II. Database programming. 8. Database application architectures. 9. CGI programming. 10. Perl. 11. Python. 12. PHP and other support for database-driven HTML. 13. C and C++. 14. Java and JDBC. III. Reference. 15. SQL reference. 16. MySQL and mSQL system variables. 17. MySQL and mSQL programs and utilities. 18. PHP and lite reference. 19. C reference. 20. Python reference. 21. Perl reference. 22. JDBC reference. Index.

*Computer Graphics and Geometric Modeling.* By David Salomon. Springer-Verlag, New York. (1999). 851 pages. \$64.95, DM 129.00, öS 942.00, sFr 117.50, GBP 49.50.

Contents:

Preface. 1. First principles. 2. Scan-converting methods. 3. Transformations and projections. 4. Curves. 5. Surfaces. 6. Rendering. 7. Color. 8. Computer animation. 9. Image compression. 10. Short topics. Appendix. Mathematical topics. References. Answers to exercises. Index.

*Introduction to Circuit Complexity: A Uniform Approach.* By Heribert Vollmer. Springer-Verlag, Berlin. (1999). 270 pages. \$44.95, DM 68.00, öS 497.00, sFr 62.00, GBP 26.00.

Contents:

Introduction. 1. Complexity measures and reductions. 2. Relations to other computation models. 3. Lower bounds. 4. The NC hierarchy. 5. Arithmetic circuits. 6. Polynomial time and beyond. Appendix. Mathematical preliminaries. Bibliography. List of figures. Author index. Subject index.

*Graphics and GUIs with Matlab®.* Second edition. By Patrick Marchand. CRC Press, Boca Raton, FL. (1999). 445 pages. \$39.95, DM 70.00, öS 511.90, sFr 64.00, GBP 27.00.

Contents:

1. Introduction. 2. Common plotting techniques. 3. Handle graphics. 4. Matlab's world of color and light. 5. Animation. 6. Graphical user interfaces. 7. Generating output. Appendices. A. Quick reference. B. Guimaker. C. Background. Index.

*Finiteness and Regularity in Semigroups and Formal Languages.* By A. de Luca and Stefano Varricchio. Springer-Verlag, Berlin. (1999). 240 pages. \$44.95, DM 79.00, öS 577.00, sFr 72.00, GBP 30.50.

Contents:

Preface. 1. Combinatorics on words. 2. Unavoidable regularities. 3. Finiteness conditions for semigroups. 4. Finitely recognizable semigroups. 5. Regularity conditions. 6. Well quasi-orders and regularity. References. Index.