

The Book Review Column¹ by William Gasarch and Samir Khuller Department of Computer Science University of Maryland at College Park College Park, MD, 20742 email: gasarch@cs.umd.edu

Welcome to the Book Reviews Column. We hope to bring you at least two reviews of books every month. In this column three books are reviewed. This particular column has a guest co-editor Samir Khuller because one of the books reviewed is by the usual editor William Gasarch. Samir Khuller handled that review (e.g., decided if it was in scope, found a reviewer, and proofread the final review). William Gasarch will not see the review until he reads it in SIGACT NEWS.

- 1. Computational geometry in C (Second Edition), by Joseph O'Rourke. Reviewed by: Michael Dekhtyar. This book is an introductory text in Computational Geometry. The algorithms are explained on a variety of levels including actual code.
- 2. Bounded Queries in Recursion Theory by William Gasarch and Georgia Martin. Reviewed by Lance Fortnow. This book looks at the complexity of a function in terms of how many queries to some oracle are needed to compute it. The context is recursion-theoretic.
- 3. Logic For Applications (Second Edition), By Anil Nerode and Richard A. Shore. Reviewed by Alexander Dekhtyar. This book contains both logic and logic programming, and the connections between the two.

Review of² Computational geometry in C Second Edition, 1998 Author: Joseph O'Rourke Softcover \$29.95, ISBN 0521649765 Hardcover \$69.95, ISBN 0521640105 Publisher: Cambridge University Press 424 Pages

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1 Overview

The book under review is the second edition of an introductory textbook in computational geometry. This area has seen intense development during the last two decades. Machine graphics, pattern recognition, robot motion are the main sources of the problems in this area. For many of these problems "simple" solutions can be found by brute force algorithms. But their efficient, practically implementable solutions need the deep insight into geometrical structures as well as the delicate

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