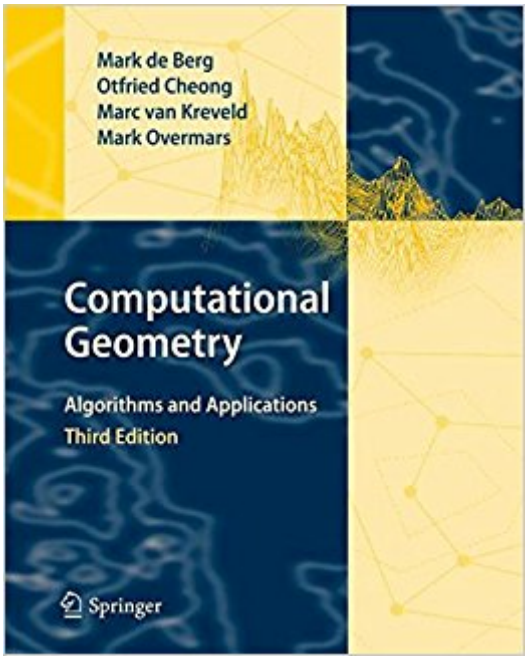
Computational Geometry: Algorithms And Applications



Synopsis

This introduction to computational geometry focuses on algorithms. Motivation is provided from the application areas as all techniques are related to particular applications in robotics, graphics, CAD/CAM, and geographic information systems. Modern insights in computational geometry are used to provide solutions that are both efficient and easy to understand and implement.

Book Information

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Customer Reviews

"An excellent introduction to the field is given here, including a general motivation and usage cases beyond simple graphics rendering or interaction." from the ACM Reviews by William Fahle, University of Texas at Dallas, USA

Comprehensive, deep, clear (i.e. readable). Pseudo-code (high level) is provided at end of each chapter. Also exercises. Reader must still convert from pseudo-code to programming language in order to actually implement. A web site is listed to help with that, which provides links to programming resources. I haven’t yet tried them..

It is a joy to read and review this book -- the exposition is crystal clear; the writing style is warm and engaging (not too terse and not too verbose), conveying understanding and not just stating facts, theorems, and algorithms; the graphics are great (numerous richly detailed illustrations); the topics hit the heart of computational geometry; the historical remarks help set context; and the book is

beautifully typeset and printed on high quality acid free paper.

This is the standard text book for CG, and it nicely introduces us to a lot of concepts. But, unfortunately it is not the best book I have read. Most of the examples albeit few, does not make much sense. The algorithms discussed sometimes cannot be grasped. I often went online to read more about the subject to understand the topics. This also could mean that my grasping of the subject is low :), but that should not matter as long as the material is explained clearly.

Beautiful book, solid contents. I learned a lot from it and had a nice time practicing with the exercises. Lots of examples and problems, a lot of interesting algorithms and techniques, every chapter is a progressive refinement of a particular idea to solve a problem expressed as geometry.Difficulty level: make sure you know some asymptotic analysis and discrete mathematics to get the best out of it, but could be read by anyone who can code i believe (although again, he'll miss a lot of beautiful mathematics)Again, i'm very satisfied with it.

Great book, very insightful and the fact the book is so technical didn't disable the book's didactic, which by the way i thought very well of it!!!!

This book is a must to all researchers and students of the field. The algorithms are always presented in the context of an application, which makes it the more understandable. However, the authors chose to present them in a very high level of abstraction, and some of the finer details - so important in these algorithms - are only mentioned, which may pose a problem to obtaining a suitable, efficient implementation of them in a programming language.

This is an excellent book about "Computational Geometry".It is very useful and easy to understand.

I expected the code to be present, all it includes are very general outlines.

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