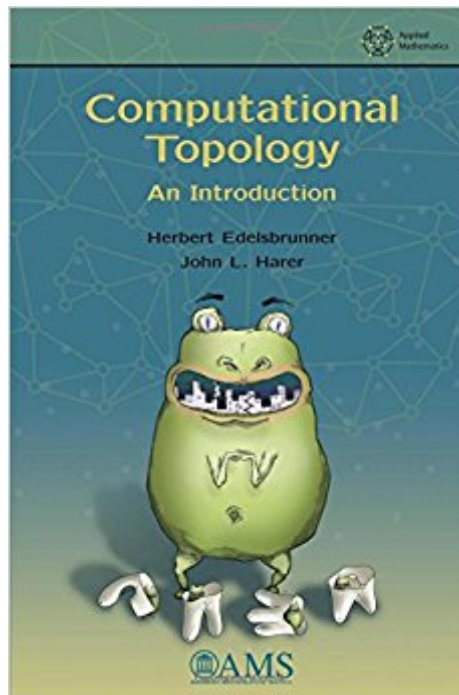




The book was found

Computational Topology: An Introduction



Synopsis

Combining concepts from topology and algorithms, this book delivers what its title promises: an introduction to the field of computational topology. Starting with motivating problems in both mathematics and computer science and building up from classic topics in geometric and algebraic topology, the third part of the text advances to persistent homology. This point of view is critically important in turning a mostly theoretical field of mathematics into one that is relevant to a multitude of disciplines in the sciences and engineering. The main approach is the discovery of topology through algorithms. The book is ideal for teaching a graduate or advanced undergraduate course in computational topology, as it develops all the background of both the mathematical and algorithmic aspects of the subject from first principles. Thus the text could serve equally well in a course taught in a mathematics department or computer science department.

Book Information

Hardcover: 241 pages

Publisher: American Mathematical Society; New ed. edition (December 8, 2009)

Language: English

ISBN-10: 0821849255

ISBN-13: 978-0821849255

Product Dimensions: 10.2 x 7.2 x 0.7 inches

Shipping Weight: 1.2 pounds (View shipping rates and policies)

Average Customer Review: 3.3 out of 5 stars 3 customer reviews

Best Sellers Rank: #664,032 in Books (See Top 100 in Books) #144 in [Books > Science & Math > Mathematics > Geometry & Topology > Topology](#) #7618 in [Books > Textbooks > Science & Mathematics > Mathematics](#)

Customer Reviews

This book is a very welcome, untraditional, thorough and well-organized introduction to a young and quickly developing discipline on the crossroads between mathematics, computer science, and engineering. --DMV Newsletter

A must have if you are new to the field of computational topology. It caters both to mathematicians and engineers. I would recommend it to all people interested.

This book is good for the topic, but if you are not familiar with topology to begin with, I would

recommend an additional text. This book's section on topology is terse.

Horrible. The English is a nightmare. Explanations are poor and notation sucks. If you want a good intro to topology (which is what half this book is) get anything out there, except for the Dover versions. And if you want the real deal in computational topology get a book in computational homology

[Download to continue reading...](#)

Computational Topology: An Introduction Computational Fluid Mechanics and Heat Transfer, Third Edition (Series in Computational and Physical Processes in Mechanics and Thermal Sciences) Current Topics in Computational Molecular Biology (Computational Molecular Biology) Theoretical Neuroscience: Computational and Mathematical Modeling of Neural Systems (Computational Neuroscience Series) Simulating Enzyme Reactivity: Computational Methods in Enzyme Catalysis (Theoretical and Computational Chemistry Series) Computational Approaches to Protein Dynamics: From Quantum to Coarse-Grained Methods (Series in Computational Biophysics) The Power of Computational Thinking: Games, Magic and Puzzles to Help You Become a Computational Thinker Introduction to Topology: Pure and Applied Introduction to Topology: Third Edition (Dover Books on Mathematics) Introduction to Topology Introduction to Topology: Second Edition (Dover Books on Mathematics) Algebraic Topology: An Introduction (Graduate Texts in Mathematics) (v. 56) A Combinatorial Introduction to Topology (Dover Books on Mathematics) Introduction to Topology and Geometry Numerical Partial Differential Equations in Finance Explained: An Introduction to Computational Finance (Financial Engineering Explained) An Introduction to Theoretical and Computational Aerodynamics (Dover Books on Aeronautical Engineering) An Introduction to Systems Biology: Design Principles of Biological Circuits (Chapman & Hall/CRC Mathematical and Computational Biology) Computational Seismology: A Practical Introduction Introduction to Computational Materials Science Introduction to Computational Materials Science: Fundamentals to Applications

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)