

Librería
Bonilla y Asociados
desde 1950



Título: Topology For Computing

Autor: Afra J. Zomorodian

Precio: \$570.18

Editorial:

Año: 2009

Tema:

Edición: 1^a

Sinopsis

ISBN: 9780521136099

The emerging field of computational topology utilizes theory from topology and the power of computing to solve problems in diverse fields. Recent applications include computer graphics, computer-aided design (CAD), and structural biology, all of which involve understanding the intrinsic shape of some real or abstract space. A primary goal of this book is to present basic concepts from topology and Morse theory to enable a non-specialist to grasp and participate in current research in computational topology. The author gives a self-contained presentation of the mathematical concepts from a computer scientist's point of view, combining point set topology, algebraic topology, group theory, differential manifolds, and Morse theory. He also presents some recent advances in the area, including topological persistence and hierarchical Morse complexes. Throughout, the focus is on computational challenges and on presenting algorithms and data structures when appropriate.