CGAL arrangements and their applications : a step-by-step guide

Fogel, Efi, author

Abstrak

This book is about how to use CGAL two-dimensional arrangements to solve problems. The authors first demonstrate the features of the arrangement package and related packages using small example programs. They then describe applications, i.e., complete standalone programs written on top of CGAL arrangements used to solve meaningful problems, for example, finding the minimum-area triangle defined by a set of points, planning the motion of a polygon translating among polygons in the plane, computing the offset polygon, finding the largest common point sets under approximate congruence, constructing the farthest-point Voronoi diagram, coordinating the motion of two discs moving among obstacles in the plane, and performing Boolean operations on curved polygons.