

1. Record Nr.	UNISA996466160303316
Autore	Veltkamp Remco C
Titolo	Closed Object Boundaries from Scattered Points [[electronic resource] /] / by Remco C. Veltkamp
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1994
ISBN	3-540-49108-2
Edizione	[1st ed. 1994.]
Descrizione fisica	1 online resource (VIII, 152 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 885
Disciplina	006.6/6
Soggetti	Geometry Software engineering Topology Computer graphics Optical data processing Pattern recognition Software Engineering/Programming and Operating Systems Computer Graphics Image Processing and Computer Vision Pattern Recognition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Geometric graphs -- The γ -Neighborhood Graph -- Boundary construction -- Boundary from the γ -Graph -- Approximation and localization -- The flintstones -- Smooth curves and surfaces -- G 1 boundary construction -- Conclusions.
Sommario/riassunto	This monograph is devoted to computational morphology, particularly to the construction of a two-dimensional or a three-dimensional closed object boundary through a set of points in arbitrary position. By applying techniques from computational geometry and CAGD, new results are developed in four stages of the construction process: (a) the gamma-neighborhood graph for describing the structure of a set of points; (b) an algorithm for constructing a polygonal or polyhedral boundary (based on (a)); (c) the flintstone scheme as a hierarchy for

polygonal and polyhedral approximation and localization; (d) and a Bezier-triangle based scheme for the construction of a smooth piecewise cubic boundary.
