Sampling and MLS
Sampling Point-Set Implicits p. 11
Low-Discrepancy Point Sampling of Meshes for Rendering p. 19
Direct Computing of Surface Curvatures for Point-Set Surfaces p. 29
Deformation
Interactive Editing of Large Point Clouds p. 37
SIMOD: Making Freeform Deformation Size-Insensitive p. 47
Animation
Efficient Bounds for Point-Based Animations p. 57
Efficient Refinement of Dynamic Point Data p. 65
Geometry and Analysis
Approximate Star-Shaped Decomposition of Point Set Data p. 73
On the use of Gromov-Hausdorff Distances for Shape Comparison p. 81
Topological Methods for the Analysis of High Dimensional Data Sets and 3D Object Recognition p. 91
Rendering
Efficient Point-Based Rendering Using Image Reconstruction p. 101
Surfel-Based Billboard Hierarchies for Fast Rendering of 3D-Objects p. 109
Compression
A Parallelly Decodeable Compression Scheme for Efficient Point-Cloud Rendering p. 119
Self-Similarity-Based Compression of Point Clouds, with Application to Ray Tracing p. 129

Table of Contents provided by Blackwell's Book Services and R.R. Bowker. Used with permission.