Preface p. ix
Conference Committees p. x
Reviewers p. xii
Paper Sessions

Rendering
Simulating the Aurora Borealis p. 2
Rendering Iridescent Colors Appearing on Natural Objects p. 15
Rendering Natural Waters p. 23
Interactive Rendering Method for Displaying Shafts of Light p. 31

Global Illumination
Handling Dynamic Changes in Hierarchical Radiosity through Interaction Meshes p. 40
Enhanced Automatic Creation of Multi-Purpose Object Hierarchies p. 52
A New Adaptive Density Estimator for Particle-Tracing Radiosity p. 62
Acceleration of Monte Carlo Path Tracing in General Environments p. 71

Text Layout, Rendering, and Visibility
Arbitrary Precise Orientation Specification for Layout of Text p. 80
Line-Art Rendering of 3D-Models p. 87
Practical Texture Mapping on Free-form Surfaces p. 97
Visibility in the Presence of Occluders with Curved Boundaries p. 105

Modeling and Simulation
Interactive Simulation of Surgical Cuts p. 116
Simulation of FLIR and LADAR Data using Graphics Animation Software p. 126
Modeling of Smoke Flow Taking Obstacles into Account p. 135

Surface Modeling and Processing
The Intersection of Two Ringed Surfaces p. 146
Interpolating and Approximating Moving Frames using B-Splines p. 154
Modeling an Isosurface with a Neural Network p. 165
Blending Pipe Surfaces with Piecewise Algebraic Surfaces p. 175

Dynamic and Subdivision Surfaces
FEM-based Dynamic Subdivision Splines p. 184
A New Paradigm for Changing Topology during Subdivision Modeling p. 192
Subdivision Surface Fitting using QEM-based Mesh Simplification and Reconstruction of Approximated B-spline Surfaces p. 202
Dynamic PDE Surfaces with Flexible and General Geometric Constraints p. 213

Meshes and Contours
Efficient Processing of Large 3D Meshes p. 224
Vertex Data Compression for Triangular Meshes p. 225
Efficient Coding of Non-Triangular Mesh Connectivity p. 235
Turning Unorganized Points into Contours p. 243

Geometric Modeling
A Matrix-based Approach to Reconstruction of 3D Objects from Three Orthographic Views p. 254
Table of Contents provided by Blackwell's Book Services and R.R. Bowker. Used with permission.