

Table of Contents

Volume I

Conference Chairman's Message	1
Thalmann,N.M., Volino,P., Yang, Y.: 3D Clothes Animation and Fashion Show Simulation	2
Arques,D.,Michelin,S.: Improving the zonal method through the use of series developments to approximate volume/volume form factors	21
Bartanus,M.,Ferko,A.,Mag,R.,Niepel,L.,Plachetka,T., Sikudova,E.: New Heuristics for Minimum Weight Triangularization	31
Chalopin,F.-P., Bourdin,J.-J.: Straight Lines: a step by step method	41
Day,J.D.: Image Space Algorithms for Line Clipping	47
De Liberato,A.,Molledo,L.: Icons for the Visualization of Tensor Fields	55
Dobes,M.: Pre-processing of the Fingerprint Image	65
Dubuis,E.: Graphical User Interfaces: Mess them up!	71
Ezaki,T., Short,D.R.: Scientific Visualization Ability Development	79
Foris,T.,Marton,G., Szirmay-Kalos,L.: Ray Shooting in Logarithmic Time	84
Gajewski,R.R.,Kowalczyk,T.: Object-Oriented Graphic Environment for Structural Analysis	91
Groeller,E.,Wegenkittl,R.: Interactive Design of Nonlinear Functions for Iterated Function Systems	93
Grosso,R.,Ertl,T.,Aschoff,J.: Efficient Data Structures for Volume Rendering of Wavelet-Compressed Data	103
Habibi,A.,Luciani,A., Vapillon,A.: A Physically-based Model for the Simulation of Reactive Turbulent Objects	113
Hamel,J.,Michel,R.,Strothotte,T.: Visibility through Inaccuracy: Geometric Distortion to Reduce the Cluttering in Route Maps	123
Karner,K.F.: Using Images to Estimate Reflectance Functions	133
Kopp,M.: Lossless Wavelets Based Image Compression with Adaptive 2D Decomposition	141
Lahtinen,S.-P.,Lamminjoki,T.,Sutinen,E.,Tarhio,J.,Tuovinen,A.P.: Towards Automated Animation of Algorithms	150
Lemstrom,K.,Tarhio,J.,Takala,T.: Color Dithering with n-best Algorithm	162
Loeffelmann,H.,Szalavari,Z.,Groeller,E.: Local Analysis of Dynamical Systems - Concepts and Interpretation	170
Luga,H., Torguet,P., Duthen,Y., Caubet,R.: A Model for a User-Adaptive Response to Interactions in Virtual Worlds	181
Maierhofer,A.A.,Gervautz,M.,Karner,K.F.: Meshing for Discontinuity Driven Hierarchical Radiosity	192
Manda,V.,Slavik,P.: A New Method for Formal Description of 3D Scenes	199
Moeller,T.: Radiosity Techniques for Virtual Reality - Faster Reconstruction and Support for Levels of Details	209
Pereira,J.M.,Wuthrich,C.A.,Gomes,M.R.: Full-Frame Compositing for Sort Last Polygon Rendering on a Multicomputer	217
Sponsors	
Intergraph	232

Table of Contents

Volume II

Beneš, B., Holeček, A., Žára, J.: Language Support for Distributed Virtual Reality	233
Hejda, P., Žára, J.: Channel - a Generalized Pipeline	244
Hrúz, T., Považan, I., Gosiorovský, R.: Hidden Line Problem Formulated as a Set Union Problem	246
Hua, S., Tokuta, A.: Generalized Clipping of a Polygon Against a 2D Arbitrary Window and 3D Non-Convex Volume	257
Iovea, M., Marinescu, A., Chitescu, P., Sava, T., Rizescu, C., Georgescu, Gh.: Graphic Environment for Industrial Computerized Tomography	267
Košek, M.: Simple, Efficient and Flexible CAD System for Textile Patterning	269
Křenek, A.: Molecular Models Superposition and Visualization	271
Mrázek, P.: Genetic Algorithms and Image Search	278
Nechvile, K., Sochor, J.: Form-factor Evaluation with Regional BSP Trees	285
Nikiel, S.S.: An Efficient Fractal Modeller (Modification of the Iterated Function System)	294
Schmalstieg, D., Faisstnauer, Ch., Mazuryk, T.: Constructing a Highly Immersive Virtual Environment: A Case Study	301
Šimek, P., Slavík, P.: Constraint Satisfaction Problem Solved by Minimal Changes Method	311
Šindlar, L., Pelikán, J.: Parallel Radiosity on a Cluster of Workstations	322
Strah, S., Žalik, B.: Interactive Description of Constrained Form-Features	332
Stuerzlinger, W.: Optimized Local Pass using Importance Sampling	342
Szirmay-Kalos, L., Marton, G., Foris, T., Fabian, J.: Application of Object-oriented Methods in Process Visualization	349
Tobler, R.F., Loeffelmann, H., Galla, T., Purgathofer, W.: BABEL: A Generic Data Structure for Geometric Modeling	359
Traxler, Ch., Gervautz, M.: Using Genetic Algorithms to Improve the Visual Quality of Fractal Plants Generated with CSG-PL Systems	367
Tsai, Y.T., Fernando, T., Dew, P.M.: Exploiting Degrees of Freedom Analysis for Interactive Constraint-based Design	377
Tsegaye, E., Werner, F., Wutrich, C.A.: Checking Boundary Non-Manifoldness of Solid Objects for Steel Construction	388
Wang, X., Lim, J., Collins, R.T., Hanson, A.R.: Automated Texture Extraction from Multiple Images to Support Site Model Refinement and Visualization	399
Zachariáš, S.: Projection in barycentric coordinates	409
Wolter, F.E.: Differential Geometric Concepts and Methods in CAGD	419
Fellner, D.: Design of a Graphics Architecture bridging the gap between modeling and rendering	420
Zemcik, P.: Optimisation of Subspace Evaluation in Ray Tracing	421
Sponsors	
I B M	426
Hewlett Packard	427