SIGGRAPH 93
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Interactive Techniques

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COURSE NOTES 16

Stereo Computer Graphics with Applications to Virtual Reality

ORGANIZERS/LECTURERS
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Abstract:
This course provides an introduction to the rapidly growing area of stereo computer graphics It introduces the participants to some of the issues in creating stereo computer graphics Topics covered include 1) introduction to depth perception, 2) computation of stereo images, 3) stereoscopic interface issues, and 4) algorithms modified for stereo

Speaker Biographies

David McAllister received his BS in mathematics from the University of North Carolina at Chapel Hill in 1963 Following service in the military, he attended Purdue University, where he received his MS in mathematics in 1967 He received his Ph D in Computer Science in 1972 from the University of North Carolina at Chapel Hill Dr McAllister is a professor in the Department of Computer Science at North Carolina State University He has published many papers in the areas of 3D technology and computer graphics and has given several courses in these areas at SPIE, SPSE and SIGGRAPH

Lou Harrison received his BS in Computer Science from North Carolina State University in 1987 and his MS in Computer Science, also from NCSU, in 1990 Mr Harrison has taught courses in Operating Systems and Computer Graphics at NCSU and is currently Software Systems Manager for the Department of Computer Science at NCSU while pursuing his Ph D He has done research in the area of "Surface Generation for Computer Aided Milling", and is currently working in the area of "True 3-D Animation and Perception " Mr Harrison is a member of ACM, SIGGRAPH, and SPIE

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Schedule

Welcome & Overview	Harrison	15 min
Introduction to Depth Perception & Stereo Graphics Concepts	Harrison	45 min
Generation and Display of Stereoscopic Images	McAllister	45 min
Exhibits and Demonstrations		15 min
Break		15 min
3D Input Devices & their use in Stereoscopic Graphics	Harrison	30 min
Algorithms Designed Specifically for Stereoscopic Graphics	McAllister	45 min
Final Remarks and Course Evaluations	Harrison	15 min