

Table of Contents

Correspondence and Tracking

An Experimental Comparison of Stereo Algorithms	1
<i>R. Szeliski (Microsoft Research, Redmond, WA), R. Zabih (Cornell University, Ithaca, NY)</i>	
A General Method for Feature Matching and Model Extraction	20
<i>C.F. Olson (Jet Propulsion Laboratory, Pasadena, CA)</i>	
Characterizing the Performance of Multiple-Image Point-Correspondence Algorithms Using Self-Consistency	37
<i>Y.G. Leclerc, Q.-T. Luong (SRI International, Menlo Park, CA), P. Fua (EPFL, Lausanne, Switzerland)</i>	
A Sampling Algorithm for Tracking Multiple Objects	53
<i>H. Tao, H.S. Sawhney, R. Kumar (Sarnoff Corporation, Princeton, NJ)</i>	
Real-Time Tracking of Complex Structures for Visual Servoing	69
<i>T. Drummond, R. Cipolla (University of Cambridge, UK)</i>	

Geometry and Reconstruction

Direct Recovery of Planar-Parallax from Multiple Frames	85
<i>M. Irani (Weizmann Institute, Rehovot, Israel), P. Anandan (Microsoft Research, Redmond, WA), M. Cohen (Weizmann Institute)</i>	
Generalized Voxel Coloring	100
<i>W.B. Culbertson, T. Malzbender (Hewlett-Packard Laboratories, Palo Alto), G. Slabaugh (Georgia Institute of Technology)</i>	
Projective Reconstruction from N Views Having One View in Common	116
<i>M. Urban, T. Pajdla, V. Hlaváč (Czech Technical University, Prague)</i>	
Point- and Line-Based Parameterized Image Varieties for Image-Based Rendering	132
<i>Y. Genc (Siemens Corporate Research, Princeton), Jean Ponce (University of Illinois)</i>	
Recovery of Circular Motion from Profiles of Surfaces	149
<i>P.R.S. Mendonça, K.-Y.K. Wong, R. Cipolla (University of Cambridge, UK)</i>	

Optimal Reconstruction

Optimization Criteria, Sensitivity and Robustness of Motion and Structure Estimation	166
<i>J. Košecká (George Mason University, Fairfax, VA), Y. Ma, S. Sastry (University of California at Berkeley)</i>	

Gauge Independence in Optimization Algorithms for 3D Vision	183
<i>P.F. McLauchlan (University of Surrey, Guildford, UK)</i>	
Uncertainty Modeling for Optimal Structure from Motion	200
<i>D.D. Morris (Carnegie Mellon University), K. Kanatani (Gunma University, Japan), T. Kanade (Carnegie Mellon University)</i>	
Error Characterization of the Factorization Approach to Shape and Motion Recovery	218
<i>Z. Sun (University of Rochester), V. Ramesh (Siemens Corporate Research), A.M. Tekalp (University of Rochester)</i>	
Bootstrapping Errors-in-Variables Models	236
<i>B. Matei, P. Meer (Rutgers University, Piscataway, NJ)</i>	

Invited Talks

Annotation of Video by Alignment to Reference Imagery	253
<i>K.J. Hanna, H.S. Sawhney, R. Kumar, Y. Guo, S. Samarasekara (Sarnoff Corporation, Princeton)</i>	
Computer-Vision for the Post-production World: Facts and Challenges through the REALViZ Experience	265
<i>L. Robert (REALViZ S.A., Sophia Antipolis, France)</i>	

Special Sessions

About Direct Methods	267
<i>M. Irani (Weizmann Institute, Rehovot, Israel), P. Anandan (Microsoft Research, Redmond, WA)</i>	
Feature Based Methods for Structure and Motion Estimation	278
<i>P.H.S. Torr (Microsoft Research, Cambridge, UK), A. Zisserman (University of Oxford, UK)</i>	
Discussion for Direct versus Features Session	295
Bundle Adjustment — A Modern Synthesis	298
<i>B. Triggs (INRIA Rhône-Alpes, Montbonnot, France), P.F. McLauchlan (University of Surrey, Guildford, UK), R.I. Hartley (General Electric CRD, Schenectady, NY), A.W. Fitzgibbon (University of Oxford, Oxford, UK)</i>	
Discussion for Session on Bundle Adjustment	373
Summary of the Panel Session	376
<i>P. Anandan (Microsoft Research, Redmond, WA), O. Faugeras (INRIA Sophia-Antipolis, France), R. Hartley (General Electric CRD, Schenectady, NY), J. Malik (University of California, Berkeley), J. Mundy (General Electric CRD, Schenectady, NY)</i>	
Author Index	383