

Table of Contents

Foreword	V
<i>George Metakides</i>	
Preface	VII
<i>Guy A. Orban and Hans-Hellmut Nagel</i>	
Local Operations: The Embodiment of Geometry	1
<i>Jan-Johan Koenderink, Astrid Kappers and Andrea van Doorn</i>	
The Analysis of Motion Signals and the Nature of Processing in the Primate Visual System	24
<i>Guy A. Orban</i>	
Motion Perception and Eye Movement Control	57
<i>Klaus-Peter Hoffmann</i>	
Computational Aspects of Motion Perception in Natural and Artificial Vision Systems	71
<i>Alessandro Verri, Marco Straforini and Vincent Torre</i>	
Four Applications of Differential Geometry to Computer Vision	93
<i>Rachid Deriche, Olivier Faugeras, Gérard Giraudon, Théo Papadopoulos, Régis Vaillant and Thierry Viéville</i>	
Geometry of Vision	142
<i>Michel Demazure, Jean-Pierre Henry, Michel Merle and Bernard Mourrain</i>	
A Method of Obtaining the Relative Positions of 4 Points from 3 Perspective Projections	184
<i>H. Christopher Longuet-Higgins</i>	
Direct Estimation of Optical Flow and of Its Derivates	193
<i>Hans-Hellmut Nagel</i>	
The Cracking Plate and Its Parallel Implementation	225
<i>Marc Proesmans and André Oosterlinck</i>	
The Perception and Representation of Depth and Slant in Stereoscopic Surfaces . .	241
<i>Brian J. Rogers</i>	

Experiments on Stereo and Texture Cue Combination in Human Vision Using Quasi-Neutral Viewing	267
<i>John P. Frisby and David Buckley</i>	
The Analysis of Natural Texture Patterns	298
<i>Roger J. Watt</i>	
Segmenting Textures of Curved-Line Elements	324
<i>David R. Simmons and David H. Foster</i>	
Extraction of Shape Features and Experiments on Cue Integration	350
<i>Jan-Olof Eklundh, Jonas Gårding, Tony Lindeberg and Fredrik Bergholm</i>	
Appendix I: Addresses	380
Appendix II: Curricula Vitae	383