## Contents

Foreword Preface		v vii
2.	Image Quality Assessment Based on Weighted Perceptual Features  D. V. Rao and L. P. Reddy	29
3.	Quasi-reversible Two-dimension Fractional Differentiation for Image Entropy Reduction  A. Nakib, A. Nait-Ali, H. Oulhadj and P. Siarry	57
4.	Parallel Genetic Algorithm Based Clustering for Object and Background Classification  P. Kanungo, P. K. Nanda and A. Ghosh	69
5.	Bipolar Fuzzy Spatial Information: First Operations in the Mathematical Morphology Setting $I.\ Bloch$	91
6.	Approaches to Intelligent Information Retrieval $G.\ Pasi$	113
7.	Retrieval of On-line Signatures H. N. Prakash and D. S. Guru	131

8.	A Two Stage Recognition Scheme for Offline Handwritten Devanagari Words	145
	B. Shaw and S. K. Parui	
9.	Fall Detection from a Video in the Presence of Multiple Persons	167
	V. Vishwakarma, S. Sural and C. Mandal	
10.	Fusion of GIS and SAR Statistical Features for Earthquake Damage Mapping at the Block Scale	195
	G. Trianni, G. Lisini, P. Gamba and F. Dell'Acqua	
11.	Intelligent Surveillance and Pose-invariant 2D Face Classification	207
	B. C. Lovell, C. Sanderson and T. Shan	
12.	Simple Machine Learning Approaches to Safety-related Systems	231
	C. Moewes, C. Otte and R. Kruse	
13.	Nonuniform Multi Level Crossings for Signal Reconstruction N. Poojary, H. Kumar and A. Rao	251
14.	Adaptive Web Services Brokering K. M. Gupta and D. W. Aha	269
15.	Granular Support Vector Machine Based Method for Prediction of Solubility of Proteins on Over Expression in Escherichia Coli and Breast Cancer Classification  P. Kumar, B. D. Kulkarni and V. K. Javaranan	289