Table of Contents

Keynote l	Papers
-----------	--------

Designing Interactive Computing for Happy Healthy Life	1
Computing the Incomputable with Human Processing Units Jonathan Corney, Gokula Annamalai Vasantha, Andrew Lynn, Ananda Jagadeesan, Nuran Acur, Marisa Smith, and Anupam Agarwal	14
Indexing for Image Retrieval: A Machine Learning Based Approach Santanu Chaudhury and Ehtesham Hassan	25
A Unifying Framework for Correspondence-Less Shape Alignment and Its Medical Applications	40
Full Papers	
Adaptive Hand Gesture Recognition System for Multiple Applications	53
Enhancement of High Dynamic Range Dark Images Using Internal Noise in DWT Domain	66
Identification of Title for Natural Languages Using Resource Description Framework and Anaphoric Reference Resolution Madhuri A. Tayal, Mukesh Raghuwanshi, and Latesh Malik	75
Facilitating Social Interaction in Public Space	89
Testing the Effectiveness of Named Entities in Aligning Comparable English-Bengali Document Pair	102
Self-embedding Pixel Wise Fragile Watermarking Scheme for Image Authentication	111
CUDA Based Interactive Volume Rendering of 3D Medical Data	123

Enhancement of Screen Film Mammogram Up to a Level of Digital Mammogram	133
An Object Separability Based No-Reference Image Quality Measure Using Statistical Properties of Objects	143
Generation of Future Image Frames for an Image Sequence	154
Solving a Maze: Experimental Exploration on Wayfinding Behavior for Cognitively Enhanced Collaborative Control	163
Semantic Annotation of Web Documents for Efficient Information Retrieval	178
Intelligent Interactive Tutor for Rural Indian Education System Omna Toshniwal and Pradeep Yammiyavar	186
Crop Classification Using Gene Expression Programming Technique Omkar Subbarama Narasipura, Rithu Leena John, Nikita Choudhry, Yeshavanta Kubusada, and Giridhar Bhageshpur	200
Software Security Testing Process: Phased Approach	211
Short Papers	
An ε-Optimal Strategy of Algorithmic Game Theory for Project Selection under Fuzziness	218
Factors of Influence in Co-located Multimodal Interactions	231
Hierarchal Structure of Community and Link Analysis	246
A Model to Calculate Knowledge from Knowledge Base	255
Information Extraction from High Resolution Satellite Imagery Using Integration Technique	262

Table of Co	ontents	ΧV
Multilevel Semi-fragile Watermarking Technique for Improving Biometric Fingerprint System Security	2	272
Implementation of Fractal Dimension for Finding 3D Objects: A Texture Segmentation and Evaluation Approach		284
Fuzzy Clustering of Image Trademark Database and Pre-process Using Adaptive Filter and Karhunen-Loéve Transform		297
Lesion Detection in Eye Due to Diabetic Retinopathy Pankaj Badoni and R.C. Tripathi		306
Classification and Live Migration of Data-Intensive Cloud Comp Environment	-	316
Speed Invariant, Human Gait Based Recognition System for Vic Surveillance Security		3 2 5
Multiresolution Framework Based Global Optimization Technique for Multimodal Image Registration		336
Author Index		34 9