Volume 2, Number 1, June 2014

Pattern Recognition
Fusion Based FastICA Method: Facial Expression Recognition ..........................................................1
Humayra B. Ali and David M W Powers

Detection of Façade Regions in Street View Images from Split-and-Merge of Perspective Patches .........................8
Fei Liu and Stefan Seipel

Detection of Prostate Abnormality within the Peripheral Zone Using Grey Level Distribution ..........................15
Andrik Rampun, Paul Malcolm, and Reyer Zwiggelaar

Abnormal Motion Analysis for Tracking-Based Approaches Using Region-Based Method with Mobile Grid ........22
Jorge Henrique Busatto Casagrande and Marcelo Ricardo Stemmer

A Review on Human Actions Recognition Using Vision Based Techniques ..................................................28
Muhammad Hassan, Tasweer Ahmad, Nudrat Liaqat, Ali Farooq, Syed Asghar Ali, and Syed Rizwan Hassan

Video Stabilization, Camera Motion Pattern Recognition and Motion Tracking Using Spatiotemporal Regularity Flow .........................................................................................................................33
Karthik Dinesh and Sumana Gupta

Robust Algorithm for Object Detection and Tracking in a Dynamic Scene .......................................................41
Saad A. Yaseen and Sreela Sasi

A Robust Technique for Background Estimation in Heavily Intruded Videos ..................................................46
Bhumi Sabarwal, Priya Singh, and K S Venkatesh

Robust Method to Compute Mutual-Spatial Feature for Image Parsing Problem ..............................................54
Thi Ly Vu and Chong Ho Lee

Image Retrieval and Machine Vision
Automatic Image Annotation Using Fuzzy Cross-Media Relevance Models ....................................................59
Mohamed Alkaoud, Ibrahim AshShohail, and Mohamed Maher Ben Ismail

Fusion of Depth and Color Images for Dense Simultaneous Localization and Mapping ..................................64
Dylan T. Conway and John L. Junkins

SIFT and SURF Performance Evaluation for Mobile Robot-Monocular Visual Odometry ............................70
Houssem Eddine Benseddik, Oualid Djezkoune, and Mahmoud Belhocine

3D Reconstruction and Image Processing
Estimation of 3D Geometry Using Multi-View and Structured Circular Light System ....................................77
Deokwoo Lee and Hamid Krim

Stereo Image to Graphics Conversion for Indoor Environments .....................................................................83
Vishwmitra S. Bhadouria, Disha Prakash, and Venkatesh K. Subramanian

A Fast and Shorter Path Finding Method for Maze Images by Image Processing Techniques and Graph Theory ...... 89

Yoshitaka Murata and Yoshihiro Mitani