Vol. 1 Special Issue 2 December ISSN 2454-4558

An International Journal

MASTJ

Bi-Annual

APPLICATION FABRICS

Vol. 1 Special Issue. 2 December ISSN 2454-4558

An International Journal

MASIVJ

Bi-Annual

MASIVJ
Madurai Sivakasi Nadars Pioneers Meenakshi Women's College
Poovanthi, Tamil Nadu, India
Email: journmsnpioneer@gmail.com
Ph: 9843259191

FUSION OF EDGE REVEALING TECHNIQUES FOR IMAGES	S.Selvarani	119
MEDICAL IMAGE PROCESSING- BONE IMAGING	R. Suganya & J. Jenifer	125
A COMPARATIVE STUDY OF RIVEST CIPHER ALGORITHMS	T.Ramaporkalai	132
ENHANCED KNOWLEDGE REPRESENTATION FOR SECURED AND INTELLIGENT STORAGE AND EFFICIENT RETRIEVAL APPLICATION USING KBML FOR PLANT BIOTECHNOLOGY	B.Ilayaraja, G.Priscilla Sweetlin & Dr. Rachel Regi Daniel	136
A REVIEW ON FUSION OF FUZZY SYSTEMS AND GENETIC ALGORITHMS	I. Jenifer, S.Shobana	142
INTERNET OF THINGS VISION OF THE FUTURE INTERNET	T.Suganya, J.Christy Jeeva Ratna Devi & M.Hosanna	147
OPTIMIZATION OF HADOOP SCHEDULING WITH MESSY GENETIC ALGORITHM	S.Mohanambal	152
A SURVEY ON BIOMETRIC GAIT RECOGNITION: APPROACHES AND CHALLENGES	R. Meenakshi, S. Subha	158
IMAGE PROCESSING AND REMOTE INTELLIGENCE	S. Jebapriya	163
IMAGE DENOISING USING NON-LOCAL MEANS ALGORITHM	L.Savithiri	167
SUPER-RESOLUTION: A REVIEW	Iswarya.R , Ambika.N	172
ENHANCEMENT OF QOS CONSTRAINTS USING RESOURCE ALLOCATION SCHEME FOR LTE SYSTEM	R.Arasakumar, S.Vasuki & M.Iswarya	177

Vol. 1 Special Issue 2 December ISSN: 2454-4558

FUSION OF EDGE REVEALING TECHNIQUES FOR IMAGES

S.SELVARANI
Assistant Professor, Dept.of MCA,
Fatima College (Autonomous), Madurai

ABSTRACT

Edges portray the boundaries and are therefore a difficulty of primary importance in image processing. It is one of the basic features of an image. Edges are defined as boundary between two different regions in an image. Edge detection refers to the process of identifying and locating sharp discontinuities in an image. Image Edge detection extensively diminishes the amount of data and filters out useless information, while preserving the important structural properties in an image. Since edge detection is in the forefront of image processing for object detection, it is crucial to have a good understanding of edge detection techniques. In this paper a comparative analysis of various Image Edge Detection techniques are presented. Advantages and drawbacks of different techniques are also highlighted. Therefore edges are used for boundary estimation in the scene. Since computer vision involves the identification and classification of objects in an image, edge detection is an essential tool.

Key words: Edge Detection, Edge Detection Tools, boundary estimation, Noise, Edge Direction

I. INTRODUCTION

Edge detection is one of the most commonly used operations in image analysis. An edge is the boundary between an object and the background. The shape of edges in images depends on many parameters: The geometrical and optical properties of the object, the illumination conditions, and the noise level in the images [1]. For computer vision and image processing systems to interpret an image, the separation of the image into object and background is a critical step. Partitioning the image into a set of disjoint regions that are visually different, uniform and meaningful with respect to some characteristics such as grey level, intensity, texture or color is used for analyzing the image.

Edge detection is a terminology in image processing and computer vision, mainly in field of feature detection and feature extraction that plays an important role in an image for identification of objects [2]. The process of detecting edges for an image may facilitate in image segmentation, data compression, and also help for image reconstruction. In Image analysis process to interpret an image, one first must be able to detect the edges of each object in the image. Edge representation of an image significantly reduces the amount of data to be processed, yet it retains useful information about the shapes of objects in the scene [3].