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NCICT001

Ship Detection in High Resolution Optical Imagery by a Combination of Circle Frequency and Histogram of Oriented Gradients

N.V.Nagameena, Dr.M.G.Sumithra

BANNARI AMMAN INSTITUTE OF TECHNOLOGY

Abstract – Ship detection in high-resolution optical imagery is a challenging task due to the variable appearances of ships and background. Our aim is to detect ships in a “coarse-to-fine” manner. First to increase the separability between ships and background, the pixels in the vicinities of ships must be concentrated. Then Reed- Xiaoli (RX) algorithm is applied to extract ship candidates preliminarily and quickly by regarding ships as anomalies. To validate real ships out of ship candidates, an extra feature is provided with histograms of oriented gradients (HOGs). This extra feature focuses on the gray values rather than the gradients of an image and includes some information generated by very near but not closely adjacent pixels, which can reinforce HOG to some degree. Also circle-frequency (CF) filter is applied to the input image. Finally the feature extracted from CF filter is combined with HOG to detect the ship accurately. The accuracy of the ship is obtained with the help of sensitivity and specificity plot. The accuracy obtained for the proposed method is 99.47

Keywords – *Circle frequency-histograms of oriented gradients (CF- HOG) feature, Panchromatic image, “Reed-Xiaoli” algorithm, ship detection.*

NCICT002

AUTOMATIC VEHICLE ACCIDENT AND ALCOHOLIC DETECTION USING GSM

Sornalatha S, Kiruthika P

National

Engineering College

Abstract:

The rapid growth of technology also increases the traffic hazards. The ratio of road accidents which takes place frequently causes immense loss of life due to poor emergency facilities. In order to overcome this problem an intelligent detection system is embedded in the vehicle to report about the accident on priority contacts. Location detection and transmission of information are fully automated which wins valuable rescue time. During drunk and driving cases, the alcohol detecting sensor in vehicle senses the alcoholic gas and then the message is transmitted to microcontroller. Microcontroller connects with GSM and GPS modules which in turn gets the position of vehicle with longitude and latitude direction. Information about the location is then sent to the priority contacts via GSM and the internal combustion of the engine stops.

NCICT003

A systematic method for limning based on image processing

RUTH SAMUEL

Department of Computer Science and Engineering, CSI College of Engineering
ruthsam1874@msn.com

Abstract-Limning describes the art of making pencil drawing. Pencil drawing may serve a number of purposes: manually making a piece of drawing gives the originality to a picture, gives restfulness to the one who does it, helpful in bringing out the creativity also used in the designing purposes. To make pencil drawing one must have idea about various pencils. This paper proposes a guide for making a pencil drawing efficiently using the approach of image processing by helping out with the usage of various pencils based on the intensities of the pixels in the image.

Keywords:- Pencil drawing, image processing for pencil drawing, guide for pencil drawing, Pencil shades, Pencil drawing techniques.

NCICT004

SIGN LANGUAGE COMMUNICATION FOR DEAF AND MUTE PERSONS

Ranjitha D,Ragasumidha G,Rajeswari J, Mrs S.Pradeepa

Department of CSE, Adithya Institute of technology.

Abstract—In our project we proposed to develop an Android Application for deaf people to communicate with other people normally. The Sign Languages are used, which were generally used by the deaf people in their conversation. Here the Speech-to-Sign and Sign-to- video technology are implemented. Initially,the Sign language is typed by the deaf person on one end of communication side and which is later converted into video on other end of communication side. This is achieved with Video Relay Service (VRS - enables audible language translation on smart phones with signing) technologies which can convert the sign language into video. When the speech signal is received as the response then it will be converted into sign language video. By using this application deaf person can easily interact with normal person anywhere, and he can also use this application for mobile sign translation using VRS. To achieve our project we combine variety of technology which is integrated into single part. Thus our project enables an easy way of specially abled people communication with other people in a normal way of role.

Keywords—Speech-to-sign technology, Video Relay service, mimix application, Outfit-7 Application.

NCICT005

Identifying the Evolving Communities in Dynamic Networks

P. Divya, Dr. P. Rajkumar

Info Institute Of Engineering,

Abstract: The discovery of evolving communities in dynamic networks is an important research topic that poses challenging tasks. Evolutionary clustering is a recent framework for clustering dynamic networks that introduces the concept of temporal smoothness inside the community structure detection method. Evolutionary based clustering approaches try to maximize cluster accuracy with respect to incoming data of the current time step, and minimize cluster drift from one time step to the successive one. In order to optimize both these two competing objectives, an input parameter that controls the preference degree of a user towards either the snapshot quality or the temporal quality is needed. In this paper the detection of communities with temporal smoothness is formulated as a multi objective problem and a method based on genetic algorithms is proposed. The main advantage of the algorithm is that it automatically provides a solution representing the best trade-off between the accuracy of the clustering obtained, and the deviation from one time step to the successive. Experiments on synthetic data sets show the very good performance of the method when compared with state-of-the-art approaches.

Keywords- *Evolutionary clustering, complex networks, dynamic networks, community discovery*

NCICT006

A SURVEY ON CONTRAST ENHANCEMENT USING LOCAL FEATURES METHOD

M.J.Preethi¹, Mrs.R.Mekala²

*¹PG Scholar, Department of Computer Science and Engineering, Info Institute of Engineering, India
preethiprakesh@gmail.com*

Abstract: Digital Image forensic analysis is utilized to identify the integrity and authenticity of the images. In this study we analyse two novel algorithms to detect the contrast enhancement in digital images. First, the focus is on the detection of global contrast enhancement applied to the previously JPEG-compressed images and the histogram peak/gap artefacts incurred by the JPEG compression. The pixel value mappings are analysed theoretically, and distinguished by identifying the zero-height gap fingerprints. Second, the propose is to identify the composite image created by enforcing contrast adjustment on either one or both source regions. The positions of detected block-wise peak/gap bins are clustered for recognizing the contrast enhancement mappings applied to different source regions. The consistency between regional artefacts is checked for discovering the image forgeries and locating the composition boundary.

Keywords: *Contrast Enhancement, Digital forensic, image manipulation, Histogram modification, quality enhancement, zero-bins, Peak/gap artefacts.*

FUZZY POSSIBILITY C-MEANS CLUSTERING ALGORITHM FOR CONTENT BASED REFLECTION RECOVERY

N.Sudha Assistant Professor , P.Muthukumar Scholar

Department of Computer Science , BACAS

Abstract

The growing amount of digital images caused by the more and more ubiquitous presence of digital cameras and, as a result, the many images on the world wide web confronts the users with new problems. Images are a fundamental part of daily communication. The huge amount of pictures digitally available is not manageable by humans any more. A person searching for a picture in a database of 100 images will probably find what she searches for quite fast by just viewing the images or small versions of the images (thumbnails). If a thousand, ten thousand, or even more images are involved, the task becomes boring and interminable. One way to search in image databases is to create a textual description of all the images in the database and use the methods from text-based information retrieval to search based on the textual descriptions. Unfortunately, this method is not feasible. In this work a focus is set on features for image retrieval. That is, investigated the development of representations that allow searching for images similar to a given image. These features also open up new perspectives in other fields. The features investigated here are used for the tasks of classification and for clustering images into visually similar groups. Many features that were used in image retrieval before are exemplified and compared. The main contributions of this work are quantifiable examinations of a wide variety of different features and different distance measures and a method to compare different content based image retrieval systems.

Keywords - Image Retrieval, Color-Based Retrieval, Texture Feature, Shape Feature, image clustering, K-means Clustering.

DOCTOR APPOINTMENT BOOKING SYSTEM USING ANDROID APP

Geethanjali.M Kiruthika.R Keerthana.R Indhumathi.A

V.Ganesh Karthikeyan

Abstract

The DABS(Doctor Appointment Booking System) app system consists of the entire information about the hospitals and doctors details. The app provides information about the available doctors in a hospital by which the patient can directly get an appointment for doctor consultation. The user after successful registration, should login into the app through the user name and password provided, where the users should necessarily include patient details. The patient may select one specialist among the availing doctors for their treatment and fix the appointment with respect to the working time of the doctor. Patient will receive the appointment confirmation through their mobile app. The DABS(Doctor Appointment Booking System)app system provides flexibility in changing the already fixed appointment to the user convenience by postponing the appointment with the doctor. The add-on to this system is that the patient will receive a notification 2 hours before the actual appointment. This will be very useful in case the patient tends to forget the appointment. The DABS(Doctor Appointment Booking System) app system also contain the bill record, prescription. Bill record contains the all medical details and fees details, it will very useful for the patient to know the all information and correct fees details. Prescription contains the all details about the prescribed medicines, it will useful for the patient to know the medicine details.

NCICT009

A systematic method for limning based on image processing

RUTH SAMUEL

Department of Computer Science and Engineering, CSI College of Engineering
ruthsam1874@msn.com

*Abstract-*Limning describes the art of making pencil drawing. Pencil drawing may serve a number of purposes: manually making a piece of drawing gives the originality to a picture, gives restfulness to the one who does it, helpful in bringing out the creativity also used in the designing purposes. To make pencil drawing one must have idea about various pencils. This paper proposes a guide for making a pencil drawing efficiently using the approach of image processing by helping out with the usage of various pencils based on the intensities of the pixels in the image.

Keywords:- *Pencil drawing, image processing for pencil drawing, guide for pencil drawing, Pencil shades, Pencil drawing techniques.*

NCICT010

A Survey on PSNM Algorithm To Detect A Duplicate Data From Large Dataset

P.Padmavathi¹, Mr. S. Dhanasekaran²

¹P.G Scholar, Info Institute of Engineering, Coimbatore, Tamil Nadu, India

²Assistant Professor, Info Institute of Engineering, Coimbatore, Tamil Nadu, India

Abstract- Now a day if we consider a data set we can find more duplicate data. Determining the redundant data in the data server is an open research in the data intensive application. The traditional method detects the duplicate for large dataset takes a large amount of time to produce the result. They proposed an algorithm (PSNM) such that they maximize the gain of the overall process within the time available by reporting most results much earlier than traditional approaches. The algorithm dynamically adjusts their behavior by automatically choosing optimal parameters, e.g., window sizes, block sizes, and sorting keys. The Experimental results prove that proposed system outperforms the state of arts approaches accuracy and efficiency.

Keywords-*sorted neighborhood method, multi-pass method, transitive closure, record linkage, data cleaning.*

A Survey on Detecting Selfish Nodes

E.Divya kalyani¹, Dr. S. Kirubakaran²

¹P.G Scholar, Info Institute of Engineering, Coimbatore, Tamil Nadu, India
smartdivyadk@gmail.com

²Associate Professor, Info Institute of Engineering, Coimbatore, Tamil Nadu, India
dr.s.kirubakaran@gmail.com

Abstract: The nodes work cooperatedly in mobile adhoc network (MANET). But this cooperation between nodes are not possible since it is cost intense activity which leads to a selfish manner of some nodes. Due to this performance of the system is been degraded. To identify the selfish node, watchdog mechanism has been used. But this mechanism may fail by creating false positive and false negative. Only using local watchdog may lead to poor performance. In DTN's where sporadic contact in the network in terms of speed and time. The proposed system is combining the watchdogs based on diffusion of selfish nodes and collects the information about the selfish nodes when the contact occurs. By this we have second hand information about every node. This can be done with less time and increase the perfection. There are several issues in detecting selfish nodes. The first issue is the consolidation of information, that is, the trust about neighbour's positive and negative detection, especially when it does not match the local watchdog detection. Another issue is the case of malicious node

Keywords: COCOWA, SELFISH NODES, MALICIOUS NODES, FALSE POSITIVE, FALSE NEGATIVE, WATCHDOGS

Improved Optimal Route Query Processing with Arbitrary Order Constraints

G.Suganya,II-M.E(CSE)

Info Institute of Engineering, CoimbatoreAbstract—The optimal route query finds the shortest path from the query point from a given set of spatial point DS. These are associated with some categorical information. This covers a user-specified set of categories(eg., beach, park and hotel). This can also be specified as partial order constraint between different categories eg., a ATM must be visited before hotel. In the previous work, it focused on where the query contains the total order of all categories to be visited(eg., park-ATM-hotel).The only known solution reduces the problem to multiple, total-order optimal route queries is done without such a total order. A naive approach is used in this paper .Using this naive approach a significant amount of repeated computations. Hence, it is not scalable to large datasets. A novel solution to the general optimal route query is been proposed. This is based on two different methodologies namely backward search and forward search. This proposed method can be adapted to answer a variant of the optimal route queries. In this the route only needs to cover a subset of the given categories. Extensive experiments use both real and synthetic datasets, the proposed solution are efficient and practical.

Index Terms—Query processing, spatial databases

A Novel Cancer Gene Search Model and Classification Using GPSO-BPNN

F.Leenavinmalar

M.Phil scholar, Department of computer science,
chikkanna govt arts college, Tirupur.

Dr.A.Kumar kombaiya

Assistant professor, Department of computer science,
chikkanna govt arts college, Tirupur.

Abstract: Understanding the gene expression is a crucial issue to cancer designation. One target of this understanding is implementing cancer factor search and classification ways. However, cancer factor search and classification could be a challenge in this there's no an obvious precise algorithm which will be enforced severally for varied cancer cells. During this paper a pursuit is conducted through the info mining algorithms and enforced Geometric Particle Swarm optimization (GPSO) with Back propagation Neural Network (BPNN) for cancer factor search and classification, and the way they are enforced to achieve a higher performance. Hybrid GPSO-BPNN technique is employed to enhance the accuracy and higher convergence rate. This projected technique is used to beat from the matter of procedure difficulties occur by unwell-condition of the square penalty function. Finally, the experimental result shows that this projected technique is best in gene selection with less execution time.

Keywords: *Cancer, Genes, Searching Algorithms, Classification Algorithms, Geometric Particle Swarm Optimization, Back propagation Neural Network*

Minimum Bandwidth Reservations For Wireless System using Mac

Mr. A.Sivakumar^{#1}

#Department of ECE,

S.K.R Engineering college, Chennai, Tamilnadu, India

¹ersivame@gmail.com

Abstract: Reservation based channel access used in wireless LANs provides predictable transmission and is timely for Wireless and embedded real-time applications. Minimum Bandwidth reservation was done using various methods including those of generic algorithm. The minimum bandwidth reservation problem creates the maximum execution time problem .This problem is solved by using Scheduling polices. The algorithm is a combination of scheduling polices. The scheduling polices works for a subclass of priority-driven scheduling polices namely fixed-priority, EDF and FIFO. Each node is allocating the Bandwidth reservation depending upon the service period and service interval. But they have some drawbacks in their issues. Hence over reservation is occurred. The basic idea in this work is to produce the maximum execution time problem and computing the maximum sleep time problem. Base station shall choose the optimal service interval value for each nodes, which reduce the maximum execution time problem and proved to good results with Bandwidth reservation. It provides Bandwidth saving and energy consumption.

Keywords—Medium access control, Bandwidth reservation, Schedulability test, real time, earliest deadline first, First-in-First-out.