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	Paper Title:	Risk Areas for the Insertion of Infectious Agents The Implementation of Geoproces Epidemiology	sing in	
	geoprocessing and São Luís, determine these using alphanum geographic dat device). With t livestock prope	ne current study aimed at determining risk areas for the insertion of infectious agents by means of techniques. The study was conducted in the cities of Paço do Lumiar, Raposa, São José de Ribamar which are part of the Microregion of Urban Agglomeration in the State of Maranhão. In order to e risk areas, a geographic database was developed from the collection, storage and processing of data, heric data (information from the questionnaire and data obtained from the State protection agency) and a (georeferenced maps obtained from the protection agency and field research data from a GPS his work, it was possible to identify and map risk areas by the determination of 35 points and 181 rities at higher epidemiological risk. The identification, rating and mapping of these areas will help more efficient epidemiological surveillance system and show the importance of using geoprocessing		
1.	Keywords: Epidemiological Surveillance, Geotechnologies Infirmities, Maranhão.			
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	Paper Title:	Edge Texture Analysis for Image Retrieval Application with Aid of Robust Object Recognition		
2.	Abstract: It is a new approach in extension with local binary pattern and ternary pattern called DRLBP and DRLTP. By using these methods, the category recognition system will be developed for application to image retrieval. The category recognition is to classify an object into one of several predefined categories. The discriminative robust local binary pattern (DRLBP) and discriminative robust local ternary pattern (DRLTP) are used for different object texture and edge contour feature extraction process. It is robust to illumination and contrast variations as it only considers the signs of the pixel differences. The features retain the contrast information of image patterns. They contain both edge and texture information which is desirable for object recognition. The DRLBP discriminates an object like the object surface texture and the object shape formed by its boundary. The boundary often shows much higher contrast			

object surface texture and the object shape formed by its boundary. The boundary often shows much higher contrast between the object and the background than the surface texture. Differentiating the boundary from the surface texture brings additional discriminatory information because the boundary contains the shape information. These features are useful to distinguish the maximum number of samples accurately and it is matched with already stored image samples for similar category classification. The simulated results will be shown that used DRLBP and DRLTP has better discriminatory power and recognition accuracy compared with prior approaches.

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Keywords: Histograms of equivalent patterns (HEP), Local binary pattern (LBP), Local ternary pattern (LTP), Robust Local binary pattern (RLBP), Robust Local ternary pattern (RLTP)

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Authors: Werda Alam

Paper Title: The Chemical Evolution of Mankind: The Challenges of Drug Development

Abstract: Species' have been evolving for the past 2.7 billion years. In order to do this they have had to adapt to their environment and find a means of survival. Even now this is the case for us, except we humans are at a time where we "evolve" chemically though the usage of drugs.

Keywords: Species, environment, survival, humans, evolve chemically, drugs.

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Authors: Hemraj R. Kumavat, Ganesh V. Tapkire

Paper Title: Application of Remote Sensing in Coastal Region – Case Study

Abstract: The coastal sea shore line presents serious problems to land use due to flooding, erosion, pollution, and emerging threat posed by rising sea level due to tidal currents. All these require constant monitoring and preventive measure in order to control economy. There are various methods in practice to monitor the coastal processes via, aerial survey, bathymetric mapping, land use and land cover mapping by remote sensing. In this research paper, the changes in the coastal environment and shoreline behavior in Vasai creek are analyzed by using remotely sensed digital data. Visual interpretation of water quality and study the dispersion of polluted water of sea shore line. The land form features changes were quantified by unsupervised classification technique and which will be vital information for coastal planning for development works. The coastal sea shore line of Vasai creek was observed in year of Jan 1999 and Feb 2001 had undergone some significant change in the area of human settlement, salty land and barren land. There was small increase in the area of human settlement; decrease in salty and barren land was observed. The Pollution influx of Mahim creek and Malad creeks were observed. After studied all results the shoreline of Vasai creek was fairly stable.

Keywords: Remote Sensing DATA, Satellite imagery.

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Paper Title: Effects of Time Laps Affects the Compressive Strength of Cement

Abstract: In regular Practice delay in Plastering due to various reasons like material availability, labour recess time, or unskilled labour workmanship due to other activity improper plastering sequence. For usually long delay during plastering the mortar should be kept alive by periodically it keep to mortar workable this study gives the strength data simulating such improper plastering sequence to scope this problem related to improper plastering sequence which ultimately result in formation of joints. And joint portion in regular plastering practice no any other treatment or method can used in ordinary construction method. For this study point of view we prepare the cement cube at laboratory in same manner as per the site condition. And conduct test from this result shows the effects of delay in workmanship and joint affects the strength of cement.

Keywords: Time laps, Mortar Joint, Improper plastering sequence (cement slurry) compressive strength of cement.

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Authors: Jaimik Vaghela, Akshay Sharma, Harsh Sharma Paper Title: Generation of Variable Step up DC Voltage Using Marx Generator Circuitry

Abstract: The Generation of self-supplied variable step up DC voltage proposed is originates from conventional Marx generators. This recently developed Marx generator circuit employs high voltage (HV) Metal Oxide Semiconductor Field Effect Transistor (MOSFET) as switches and series connected diodes as isolated components. Optic coupler are use to isolate and protect the damaging of low voltage deices from HV circuit. Project Results of 10 stages having pulses of 12v, 10ms and 50Hz are accustomed in project. The switching of MOSFET will be done and controlled by matrix keyboard and programmed microcontroller such that, we can get variable step up DC voltage. This topology of the circuit generates pulses with fast rise time and allows easy variable step-up output voltage. In addition, as there is use of microcontroller the circuit is capable to adjust positive or negative pulse Width, dead-time between two pulses.

Keywords: MOSFET, microcontroller, step up DC voltage, self-supplied, Marx generator, solid-state devices, High voltage pulses.

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Authors: S. K. Abdul Siddique, K. Vijaya Kumar Reddy Paper Title: Theoretical Investigation on Combustion Chamber Geometry of DI Diesel Engine to Improve the Performance by Using Diesel-RK

Abstract: Diesel engines are prime sources to generate power in transportation industrial sectors. Limited petroleum reserves and stringent environmental norms are the two parameters to influence the diesel engine usage in this field. In diesel engines, fuel is injected into the combustion chamber and mixed with the compressed air. Proper mixing of fuel and air is important to produce controlled burn rate. Combustion chamber geometry is the key element in air fuel mixing process. In the present research paper, an attempt is made to simulate the critical combustion and put efforts to optimize the combustion chamber geometry. Diesel –RK is one of the computational fluid dynamics software specifically developed for internal combustion engine simulations. In the present study, single cylinder, four stroke direct ignition diesel engine and Diesel-RK software are considered for investigation.

Keywords: DI Diesel engine, combustion chamber, Diesel-RK, Simulation

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Authors: Shankar B, Chidambara Swamy

Paper Title: Listing and Grading of Heritage Buildings in Mysore City

Abstract: Cultural heritage is a legacy of physical artefacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations. Physical or "tangible cultural heritage" includes buildings and historic places, monuments, artefacts, etc., that are considered worthy of preservation for the future. Mysore is one of the important cultural heritage cities in India. It has many built heritage structures to include monuments, heritage buildings, and heritage areas. A very few buildings have been identified by the State Archaeology Department and Mysore Urban Development Authority. The majority of the unlisted buildings are undergoing a tremendous pressure for demolition, structural transformation and decay due to absence of clear cut guidelines from the planning authority. Therefore, there is a need for identifying for protection, conservation and regulating them. The paper presents the framework for listing and grading of heritage buildings in for effective protection, conservation and management the City of Mysore.

Keywords: Heritage Buildings, Listing, Grading, culture

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Authors: VA Kulkarni, B.B. Ahuja

Paper Title: Statistical Performance Analysis of Zirconia-Dolerite Ball Plate for Dimensional Stability

Abstract: A novel artifact zirconia-dolerite ball plate is developed for interim check of coordinate measuring machine. Artifact contains 52 balls and distances between balls are used for analysis of measuring volume of CMM. Statistical performance analysis is explained in this paper. Stability of Ball plate is explored through cross correlation. The resultant corroleogram depicts that the ball plate can be used for 11 months without recalibration or rechecking for dimensional stability.

Keywords: Artifact, Ball Plate, Run Test, Cross Correlation

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Authors: Anthony Nkem Ede, Peace Feyiyemi Adepoju, Paul Oluwaseun Awoyera Paper Title: Challenges of Car Pack Design in Nigeria

Abstract: Problems of parking space in urban towns and in all places of large congregation is becoming a common issue around the world. Over the years engineers and architects have come up with a lot of solutions finding a way to create more parking spaces within minimum size of land by the design and construction of multi-storey car parks. This is line with the trend in modern cities all over the world of developing high-rise buildings as to overcome the challenges of urban over population, for optimal use of scarce land resources, as status symbol, etc. Standing on the advances made so far and the frequent problematics verified on existing multi-storey car parks, this research presents the design of a multi-storey car park for the mitigation of traffic challenges in public areas using Canaan land, Ota Nigeria as a case study. Canaan land, the seat of Faith Tabernacle in Ota, Ogun State of Nigeria is used as a case study because of the amount of vehicles that compete for parking space on Sundays or on other days of events. The research consists of the creation of the architectural drawings of the multi-storey car park with AutoCAD drafting and the modelling, structural analysis and design using the software Orion R16. The structural analysis and design were challenging but good results were obtained, approach for more innovative multi-storey car park identified.

Keywords: Design, Multi-Storey Car Park, Structural Analysis, Traffic Challenges, Urbanization.

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	Authors:	V. S. Malunjkar, P. Balakrishnan, S. K. Deshmukh, S. B. Dugad
	Paper Title:	Energy Efficiency of Banana (Musa sp.) Crop under Different Irrigation Methods
Abstract: The field experiment was carried out with drip method of irrigation (DMI) and conventional method of		

Abstract: The field experiment was carried out with drip method of irrigation (DMI) and conventional method of irrigation (CMI) at 100 per cent Evapotranspiration (ET) at two locations in Jalgaon district of Maharashtra during 2009-'10. The irrigation water requirement of the banana crop was noticed minimum in DMI compared to CMI treatment indicating 35.14 and 29.24 per cent water saving and 38.96 and 33.41 per cent electricity saving in experimental and farmer's fields, respectively. Early flowering and harvesting was noticed with reduction in growth

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period in DMI against CMI. The banana yields in DMI were (72.6 and 67.4 t/ha) higher against CMI (59.1 and 52.5 t/ha) under experimental and farmer's fields, respectively. In DMI about 32.70 and 29.99 per cent input energy savings and 19.73 and 14.09 per cent increase in output energy were noticed against CMI. Also, the higher energy efficiency of 13.5 and 12 was noticed in DMI as compared to CMI (7.6 and 7.4). In both the fields, 17.01 and 20.36 per cent higher BC ratios were recorded in DMI (2.27 and 2.01) over CMI (1.94 and 1.67).

In both the fields, additional benefit of 2,125 and 1,870 Rs./ha could be obtained by getting more carbon credits due to use of drip irrigation. The potential of carbon credits then projected over 5,000 ha area under banana crop in Jalgaon district. The present study reveals that drip irrigation has a definite role in minimizing the energy use in terms of water and electricity as well as reducing the impacts of climate change in Indian agriculture.

Keywords: Drip irrigation, energy consumption, CO2 emission and carbon credits.

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Authors: S. Thulasi Prasad, S. Varadarajan

Paper Title: Assessment of Heart Rate Variability using Independent Component Analysis

Abstract: According World Health Organisation reports, it is understood that cardiovascular diseases are increasing at an alarming rate and becoming main cause for more deaths. The early detection of cardiac related deceases is essential to save a patient from death. The ECG signal plays a key role in the early detection and diagnosis. In recent years there have been wide-ranging studies on Heart rate variability in ECG signals and Digital Signal Processing is becoming as an essential and effective pedagogical approach to solve a problem of detecting selected arrhythmia conditions from a patient's electrocardiograph (ECG) signals. Normally the Heart rate variability is studied based on RR interval and used analyse the sympathetic-parasympathetic autonomic stability, the risk of unpredicted cardiac death. Even there are several methods to analyze the ECG signal, the Blind Source Separation (BSS) approach is very useful and successful in extracting a cleaned ECG signal from a ECG which is mutilated badly by noise. The BSS approach, it is intended to estimate a set of underlying source signals of physiological activity from the sole observation of unknown mixtures of the sources. In this paper, first we addressed Independent Component Analysis (ICA) to remove noise and artifacts from ECGs. In the second step the noise free ECG signal is reconstructed from desired Independent Components. Finally QRS complexes, R peaks, RR intervals, and HR were found using suitable algorithms and performed a statistical analysis to finding HR Variability (HRV). This method is tested on ECG signals from in MIT-BIH Arrhythmia database.

Keywords: Arrhythmia, AV node, ECG, HRV, ICA, MATLAB, QRS, RR interval, SA node.

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Authors: P. Thangaraj, P. Balasubramanie Paper Title: A Survey on QoS Based Service Composition for Service Oriented Architecture

Abstract: Due to the tremendous growth in web services, Service Composition is a challenging problem due to the availability of composite services. Service selection is also a major factor that is to be considered during the retrieval of the service. These are influenced by functional and non functional parameters. The functional parameters include the integrity, behavior, fault tolerant service, etc. The non functional parameters include the efficiency, execution cost, time; availability; reputation and reliability are termed as QoS attributes. The various algorithms for composition include the heuristics and non heuristics. The problem formulated has to produce an optimized service composition and to select the efficient service that integrates and satisfies the needs of the end user.

Keywords: web Service; Quality of Service; functional parameters; non functional parameters; algorithm; Service Composition

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Authors:	Amal El-Berry, Afrah Al-Bossly
Paper Title:	Effect of Heat on Computer's Processor Failures

Abstract: This paper presents the effect of heat on computer's processor speed. There were two types of temperature variation that affect system performance: global temperature variations and local temperature variations. The disparity in power dissipation between active units and inactive units could result in severe hot spots on a chip, creating large temperature variations which could reduce functionality or caused timing failure. The goal of the analysis to understand the failure rate behavior of a particular item. Weibull++standard folio had been used to perform life data analysis. Degradation analysis was useful for tests performed on highly reliable products. This analysis consists of two steps: first, the failure times of the units on test were extrapolated using measurements of their degradation overtime and second, once these failure times were obtained, life data analysis is used to estimate the reliability of the product. Degradation was used to analyze the measurements of a computer processor decreasing performance. Then the failure time plot to compare the failure times that are expected from a design with a specified reliability to the actual failure times that are observed during a test. Data obtained from field failures could provide valuable information about how a product actually performs in the real world. The results indicated that the system will fail if any of the modes occurred and failure rate behavior for each failure mode was known and could been described with a life distribution and parameters. In life data analysis, it was assumed that the components being analyzed were non-repairable; that was. They were either discarded or replaced upon failure. However, for complex systems such as computers will be repaired (not discarded) upon failure. Failures were recurring events in the life of a repairable system, and data from such a system are known as recurrent event data. Weibull++ includes a choice of two methods for analyzing recurrent event data: parametric and non-parametric analysis. Event logs, or maintenance logs, capture information about a piece of equipment's failures and repairs, such as the date/time the equipment failed and the date/time the equipment was restored. This information was useful for helping companies achieve productivity goals by giving insight about the failure modes, frequency of outages, repair duration, uptime/downtime and availability of the equipment.

Keywords: Reliability, maintenance, failures, Weibull++, thermal and lifetime.

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Authors: Vasileios C. Drosos, Anastasia Stergiadou, Vasileios J. Giannoulas, George Doukas

Paper Title:

Diachronic Land Uses Changes in Semi Mountainous Areas Next to Urban and Tourist Areas

Abstract: Land cover data documents how much of a region is covered by forests, wetlands, impervious surfaces, agriculture, and other land and water types. Water types include wetlands or open water. Land use shows how people use the landscape – whether for development, conservation, or mixed uses. The relationship between the land ownership status and the rate of coverage by trees or shrubs do the unconscious people to put fires. The timeless control of changes and land use maps prevent fires aimed at creating plots. In the context of this research, land cover maps of previous years and recent ones were compared, with the help of aerial photographs and analytical and digital photogrammetric stations in representative regions of Greece. Generally we observe that where intense coastal tourist traffic (Toroni) is existed, the forest land is reduced in order to increase housing, while where there is not exist tourist traffic (all the other research areas such as Sarakina, Petrokerasa, Panorama and Pelion), the forest land is increased everywhere with parallel abandonment of agricultural land.

Keywords: Forestry, land cover, land use, photogrammetry.

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