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Vol. 4, Issue 6, January 2015, ISSN: 2231-2307 (Online)
Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.

No.  

Authors:  

Aginam C. H, Nwakaire Chidozie, Nwajuaku A.I

Paper Title:  

Engineering Properties of Lateritic Soils from Anambra Central Zone, Nigeria

Abstract:  

This study was carried out to investigate the geotechnical properties of lateritic soils from Anambra Central senatorial zone of Nigeria. Four samples were collected from four different locations in the zone, namely, Neni, Nimo, Obeledu and Enuguwu Ukwu and were designated as LAT-1, LAT-2, LAT-3 and LAT-4, respectively. The tests carried out on the soil samples include the Atterberg limit tests, particle size distribution analysis, specific gravity, compaction test using the British Standard Light (BSL) Compactive effort, and California Bearing Ratio (CBR) test as specified by the West African Standard (WAS). The tests revealed that all the samples are poorly graded. The liquid limits ranged from 28.85% to 35.7% while the plasticity indices ranged from 9.18% to 14.55%. The Maximum dry densities (MDD) and Optimum moisture contents (OMC) ranged from 1.77g/cm3 to 1.98g/cm3 and 9.5% to 14.6% respectively. The CBR values obtained were 28%, 27%, 25% and 22% respectively. Apart from the Neni sample which was classified as A-2-4 with the AASHOT classification, the other soils were classified as A-2-6 soils. All the samples were classified as SC (Clayey sands) according to USCS classification system. It was concluded that the four lateritic soil samples were suitable for sub-grade and sub-base type 2, but should not be used in road construction as a base material. Stabilization of the soil was equally recommended.

Keywords:  

California bearing ratio, compaction, Geotechnical properties, lateritic soil.

References:


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Authors:  

Ammar Saddik Dahan, Mahmoud Ahmad Eissa

Paper Title:  

The Impact of Day Lighting in Classrooms on Students' Performance

Abstract:  

The study examines daylight and other features of indoor environment of classrooms on students' learning over an academic year at selected faculties at King Abdul-Aziz University campus at Jeddah, Saudi Arabia. Correlation analysis is used to compare the performance of 400 students in 20 classrooms at the selected faculties. The classrooms were on different floors of educational buildings. A statistical model was used to investigate the link between Daylight in classrooms and students’ performance in their classrooms, despite the fact of existence of traditional descriptive learning variables. Other elements including, thermal comfort, Indoor air quality, acoustics and artificial light are examined to indicate any possible effect to students’ performance. Further investigation was made which include interviews with teaching staff to examine the effect on classroom daylight on students’ academic performance.

Keywords:  

Daylight, classrooms, educational buildings, artificial lighting, indoor environment, energy
Abstract: Revamping of ancient degraded document images is a grueling task due to their foreground text and background which is degraded due to uneven illumination, dust, water marks, smear, strain, ink bleed and low contrast etc. The proposed Binarization technique addresses this problem by using adaptive image contrast which is a combination of the local image gradient and local image contrast that is stoic to text and background variation. In the proposed technique, for an input ancient degraded document image an adaptive contrast map is first constructed. The contrast map is then binarized and combined with Canny’s edge map to recognize the text stroke edge pixels. The text of document is further segmented by a local threshold that is concluded based on the intensities of detected text stroke edge pixels within a local window. Dataset of different languages like Modi, Marathi and English are used as input in handwritten and printed form. Modi, Marathi, English database are from year 1908, 1957, 1922. The proposed system is simple, required minimum parameter tuning, and give the superior performance compared with other techniques.

Keywords: Document Image Processing, Document Analysis, Pixel Classification, Degraded Document Image Binarization, Adaptive Image Contrast.
advanced video profiles that are creeping into Digital TV Standards. It is important to observe that methodologies employed in achieving successful compression based on both inter and intra-frame redundancies rely very heavily on the frequency-domain redundancies generated by transform coding techniques and it is imperative that compression techniques place a great amount of emphasis on the correlation that can generated on a sub-image basis. Noise in images tends to decrease the correlation and noisy frames tend to compress less. Our objective in this research program is to focus on ways and means of increasing the redundancies by employing Linear Neural Network techniques with feed-forward mechanisms. Since quantization plays a major role in the amount of compression generated and the quality of the reconstructed frames, adaptive quantization based on a PSNR threshold value is employed so that best compression with a guaranteed reconstructed quality is obtained. Our research program targets to achieve the objectives: (1) better compression ratios with even fairly noisy frames (2) better quality of reconstructed frames in terms of very large PSNR and RMS Error tending towards values extremely small and nearer to 0 and (3) honoring the time constraints imposed by frame rates.

**Keywords:** Neural Networks, Peak Signal to Noise Ratio (PSNR), Root Mean Square Error (RMS), Quantization, Discrete Cosine Transform (DCT), Burrows Wheeler Transform (BWT), Rosseta Vector, bandwidth.

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6. Dong Zhang, Bin Li, Houjiang Li, “Intermedia-Based Video Adaptation System: Design and Implementation”, TSINGHUA SCIENCE AND TECHNOLOGY, Volume 17, Number 2, pp13-127, April 2012

**Authors:** Lakshmi D Kurup, Chandni Chandawalla, Zaizak Parekh, Kunjita Sampat

**Paper Title:** Comparative Study of Eucalyptus, Open Stack and Nimbus

**Abstract:** Cloud computing is a Service Oriented Architecture which reduces information technology overhead for the end-user and provides great flexibility, reduced total cost of ownership, on-demand services and many other benefits. Hence it delivers all IT related capabilities as services rather than product. Services on cloud are divided into three broad categories: Software as a Service, Infrastructure as a Service & Platform as a Service. Same as services cloud is also classified as Private Cloud, Public Cloud & Hybrid Cloud. Private cloud is gaining popularity, not only among large organizations but also small and medium enterprises. To deploy public or private cloud there are many open source software platforms available such as Eucalyptus, Nimbus, OpenStack, Open Nebula, Cloud Stack and Amazon Web Services. In this paper, we provide a comparative study of three open source cloud management platforms: Eucalyptus, OpenStack and Nimbus. We believe that the comparison presented in this paper would benefit enterprises as well as research institutes in selecting best open source platform to meet their technology demands.

**Keywords:** OpenStack, Cloud computing, Eucalyptus, Nimbus, Private Cloud, Public Cloud, Hybrid Cloud.

**References:**

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Abstract: An understanding towards the overlapping syndromes is essential to cope up the liver disease with the paradigm shift which is underway. Autoimmune hepatitis (AIH), primary biliary cirrhosis (PBC) and primary sclerosing cholangitis (PSC) all belong to the family of autoimmune liver diseases. This can result in a transient phenotypic overlap or a combined syndrome with characteristics of both diseases. It demonstrates mixed clinical presentations of immune-mediated liver injury. Due to overlapping features of AIH, some patients connote such phenotype that leads to a dubious diagnosis of any disease. In some cases, this type of diagnosis system causes the patient’s death in the absence of well-validated diagnostic criteria. Some improvements in diagnosis instrumentation and automation that has become to capture experience of any veteran person, is needed. Simulation of such diagnosis experience is extremely important as it leads to knowledge discovery. In this paper, we gave a soft computing model based disease diagnosis system for overlapping syndrome of liver disease. It helped in physician’s decision process that comes after long experience in new individual.

Keywords: AIH, PBC, PSC, physician’s, diagnostic, phenotypic, cholangitis.

References:
be analyzed for its use in automotive engineering. Model based plug-in hybrid electric vehicle energy storage system is implemented in this study. Moreover, the model can also predict pressure and temperature variations over charging and discharging states. The characterization results show that the proposed regression model of Ni-MH battery could be suited effectively for any kind of model based plug-in or hybrid electric vehicle technologies.

Keywords: Interpolation, Multi-Regression analysis, Ni-MH battery, SoC and voltage dynamics

References:

Authors: Abdu Gumaei, Bandar Almaslukh, Nejmmedde Tagou

Paper Title: An Empirical Study of Software Cost Estimation in Saudi Arabia Software Industry

Abstract: Cost estimation of software projects is a very important activity in software process development for shaping how much effort and time software projects required. Successful software projects depends mainly on an accurate cost estimation which is one of the most critical factors of good management decisions. Accurate cost estimation of software projects is not easy to do because it needs more experience and more knowledge about the nature and key features of projects. Especially as there are many cost estimation models available including algorithmic models, expert judgment model, estimating by analogy, and machine learning models. Saudi Arabia is one of the most outsourced country which has employed some methods for cost estimation. Incorrect cost estimations of projects in software development houses of this country prompted us research about the reasons for this problem. In this study, we concentrated on Saudi Arabia software companies and prepared a questionnaire to collect data with goal of exploring the software cost estimation models and analyzing the reasons which effect on the selection of software cost estimation models or methods in Saudi Arabia software industry.
**Keywords:** Software Projects, Cost Estimation, Expert Judgment Model, Algorithmic Models, Estimating by Analogy

**References:**


**Authors:** Manish Srivastava, Sunil Agarwal, Ekta Sharma

**Paper Title:** Design and Simulation of Perturb and Observe MPPT Algorithm for 72 Cell Solar PV System

**Abstract:** This paper presents the design and performance of present stand-alone solar photovoltaic energy system with p and o based mppt algorithm. The system is designed for a solar-PV panels of 72 cell.P and O algorithms is used for efficient tracking of Maximum power point and comparative analysis is done with the conventional model without MPPT algorithm. In this method, the array terminalvoltage is always adjusted according to the MPP voltage and the duty cycle is adjusted directly in the algorithm. The control loop is simplified, and the computational time for tuning controller gains is eliminated. The system as good dynamic response and good tracking accuracy. The system includes a solar panel, MPPT(maximum power point tracking ) controller, a dc-dc converter, and a single phase VSIsource inverter. The proposed system is simulated using MATLAB/Simulink model.

**Keywords:** Gimbal, Digital Controller, Frequency Domain, Bode Plot, Accuracy.

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Authors: Gelacio Castillo C, Martha P. Jiménez V, Aurora Aparicio C
Paper Title: ASIC Thread for Decimal (BCD) Algorithm: A Tutorial on How Create a Thread and to Evaluate ISPMACH4256ZE CPLD
Abstract: Here it is explained how can be designed by an easy form, and using HDL tool, a thread for implement the algorithm for natural binary format to decimal (BCD) format. In order to achieve that, here is released an explanation of such algorithm in a fast and needed way. In VHDL, structural style will be used for build each one modules for the Arithmetic Unit as well as those modules for Control Unit. The program is the set of instructions. Each instruction is a single operation as a sum, a shift, a comparison and so on. Every those instructions are carried out by a single module in VHDL. The memory to store the program it is implemented by array of registers. That array is executed in a sequence by which is driven by a Program Counter (PC). The complete architecture it explain step by step in order to it can be used as application note or a tutorial, and repeated by teachers, students and hobbyist. The complete processor it is builds in a single CPLD from Lattice Semiconductor. That is the ispMACH LC4256ZE STN144C device.
Keywords: Binary natural to decimal BCD format, tutorial on how design a thread
References:

Authors: Abdulameer K. Husain, Ayman A. Rahim A. Rahman
Paper Title: A New Scheme for Pseudo Random Numbers Generator Based on Secret Splitting
Abstract: This paper presents a secure scheme for generating a pseudo random numbers. The scheme is based on secret splitting of a piece of secret information which is used as a seed to the generator. In this scheme the procedure of splitting the secret information is performed according to a specified weight in such a way that each segment of the piece takes a special weight depending on the priority of each part of the random number sequence. Another important concept used in this method is the agreement strategy applied to the secure information. By comparison of this scheme with other methods of generating pseudo random generation, it is found that there are a secure complex relationships among the elements of the random number sequences which are difficult to be discovered by most active attacks.
Keywords: Pseudo-Random, secret splitting, Cryptography, Secrecy, agreement.
References:
Abstract: Information Systems and Network Communications has become part of our everyday life. In recent times, there has been a massive growth in computer and electronic devices as well as network-based systems either for e-commerce, e-government or internal processes within organizations. Human beings can no longer be separated from electronic devices and the internet technology. The need for information security is increasing rapidly as a result of the amount of information made available on systems and networks which are connected on the internet. The dependence on information systems and the data that is stored, processed, and transmitted by them has recorded a tremendous increase in the rate of cyber-crimes; rise of information warfare, and threat of cyber terrorism which has even led many companies, organizations and even nations to thoroughly investigate the protection of its critical infrastructures from information, systems, and network based attacks. Therefore, it is very essential to provide an effective security measure and system that ensures the confidentiality, integrity, and availability of information systems, networks, and the services and resources made available. This can be achieved using biometric and digital forensic technology (BDFT).

Keywords: About four key words or phrases in alphabetical order, separated by commas.

References:

Authors: Akshara Acharekar, Pushkar Adhikari, Pranita Doke, Spurti Shinde

Paper Title: SABIS-Comparative Studies

Abstract: S.A.B.I.S. (sEMG Accelerometer based Interactive System) is interactive software that would be used for interfacing compatible hardware systems that would help user have an entirely newer level of experience in the field of Human computer interactions. SABIS would be used to interface and calibrate systems that would be used as input for applications which would support such a system. Many aspects of human interactions can be captured using Accelerometers and surface Electromyogram signals, which give an idea regarding the movement that the user may wish to perform. This data can be sampled and converted as inputs for normal day to day computer applications which would integrate computer usage much more in the flow of human actions. Also, an extra level of research is being done to understand the use of a similar system for the elderly and disabled. This would add into an entirely new field of bioinformatics.

Keywords: Human Computer Interaction, Signal Processing, Electromyogram, Accelerometers.
Abstract: Improving the quality of the noisy digital images is an important concern and a fundamental problem in the field of image processing. For the noisy images, quality improvement via noise suppression (or denoising) can be achieved with linear and nonlinear filters. Nonlinear filters being the winners in the list of denoising filters are more concerned about preserving the edge and other fine details of an image and are popularly used in the field of image restoration applications. In this paper, a simple and effective approach to suppress salt and pepper impulse noise from highly noised digital image is reviewed and implemented. Better modifications are suggested and incorporated to enhance its denoising capability. The presented work is based on X-ray filtering scheme used in Videoclient3, one of popular image processing algorithms used in PITZ applications. X-ray filter in videoclient3 compares the central (suspected to be noisy) pixel with neighbors to see if the central pixel needs replacement, and has a percentage to control how intensively the filtering process is. The estimation of the noisy pixels is obtained by local mean. The essential advantage of applying X-ray filter is to effectively suppress the heavy noise and preserve sharp details of the original image. The simulation results on standard test images demonstrate the filter’s simplicity and better denoising capability compared to state of art filters.

Keywords: X-ray filter, Videoclient3, PITZ applications, noise suppression

References:
4. Weiija Xiong, Marek Otevrel, “Review on image processing algorithms used in PITZ applications,” DESY summer student program 2013.Tsinghua University, CHINA.
Abstract: We present a fast moving Open Source detection application by extending the functionality of open source tools that are available freely on the Internet. This application can be placed on a cloud infrastructure and performs fast processing so that the costs needed to use the cloud resources can be minimized.

Keywords: Open source, Motion Detection, Video Analysis

References:

Author: Y.N. Prajapati, M.K. Srivastava, Sandhya Sharma

Paper Title: Open Source Video Analysis Tool for Motion Detection

Abstract: There has been proposed the method for evaluating the routing cost which is based on the account of fractal properties of the network traffic and pre-set limits for the latency time and the number of lost packets. This method calculates the fractality of the traffic and the value of bursts. Depending on these parameters, the routing costs are recalculated and the optimal one is chosen for transferring. If the traffic is the usual Poisson flow, then the routing is not changed. If the traffic has strong long-term dependence and high bursts, then the routing cost increases in proportion to the value of Hurst exponent and the extend of bursts. The proposed method for evaluating the routing cost with regard to fractal properties of the traffic has been tested on an open platform of graphical simulation of HUAWEI networks in the existing network of "Market-port" company. During the experiment the network parameters have been defined (bandwidth, load capacity of the channels, the number of lost data, transmission delays, fractality) in the real "Market-port" network. Then the network similar to a real one has been modelled and configured in such a way that transmission time, the number of lost packets, the average latency time of the packets in the network coincides with the data having been defined in a real network of "Market-port" company. The source of the implementations of traffic in the experiments was the realization of the real network traffic captured in the network of "Market-port" company and the model implementation generated by these parameters. The studied simulation of the proposed method for evaluating the routing cost in MPLS network has shown that the use of the developed method significantly improves the quality of the service, reduces the transmission losses and permits to load network channels more evenly.

Keywords: MPLS network, traffic management control, routing cost, delays, the quality of the service, fractal traffic.

References:

Authors: Alanoud Al Mazrooa, Mohammed Arozullah

Paper Title: Securing the User Equipment (UE) in LTE Networks by Detecting Fake Base Stations

Abstract: An LTE network attacker can set up rogue base station easily to make the victim user equipment (UE) connect to such base station. The privacy of the UE will be compromised. In this paper, we propose a protocol to identify fake base stations to protect user privacy. The basic idea is to synchronize to all base stations in range and collect the network IDs. Based on the fact that legitimate base stations have the same network ID that is different from fake ones, the UE can connect to the legitimate base station with the strongest power instead of any base station with the strongest power in traditional design. Our proposed protocol is a UE side solution and no base station modification is required. This property makes our protocol can be gradually deployed in the future. Our protocol is implemented on NS3 LTE module and evaluated with various practical settings. The results indicate our protocol can ensure that the UE can always connect to the legitimate base station with the strongest power.

Keywords: LTE network attacker, NS3, UE, IDs, protocol,

References:

Authors: Vivek Dogne, Anurag Jain, Susheel Jain

Paper Title: Evolving Trends and its Application in Web Usage Mining: A Survey

Abstract: With the abundance of information available on the World Wide Web (WWW), the issue of how to extract useful knowledge from the Web has gained significant attention among researchers in data mining and knowledge discovery areas. Web mining is applied to reflect the importance of Webpages and to predict the web domain visits of various users. This article provides a survey of the available literature on Web usage mining and reviews the research and application issues in web usage mining.

Keywords: web mining, web content mining, web usage mining, web structure mining.

References:


Authors: **N. P. Joshi, R. B. Kulkarni**

**Paper Title:** Educational Web Mining System Based on Result Cache Method for Information Retrieval

**Abstract:** There were times in the past when it seems harder to find the information on specific topics and now, the same task is just a one click away. In current times, a huge pool of information is available on different topics on World Wide Web (WWW) and the task of finding a specific one becomes a bit tricky. Different techniques are out there for information searching and retrieval, from which one can choose an efficient technique called web mining. Web mining is the technique that is used for the extraction of useful information from across the available information. There are different such a sub-techniques through which a web mining can be implemented but has some challenges and issues such as network speed, longer fetching time, content availability, lack of information relevance etc. The paper presents the methodology that tries to avoid or minimize the above mentioned problems by the means of result cache approach that reduces the fetching time, increase the availability of the information resource and provides the closely accurate resources to its users.

**Keywords:** Educational Web Mining, Web mining, Information retrieval, Result cache.XML

**References:**


Authors: **Suhel Ranjan Mondal, Monalisa Bhowmik, Santanu Maity, Razia Sultana**

**Paper Title:** Comparative Analysis and Study on 4-bit RCA and CSK using CMOS Logic

**Abstract:** Adders are the most basic and essential component used in Digital signal processing and is widely used in the digital integrated circuits. In VLSI application area, delay and power are the important factors which must be taken into account in design of a full adder. In this paper a comparative analysis in terms of speed, power consumption and area and PDP for design of 4 bit RCA and CSK is compared by CMOS logic style , quantitatively and qualitatively by performing detailed transistor level simulation using T spice v13.0.

**Keywords:** Ripple carry Adder, Carry Skip Adder, ,full adder, high speed, low power.

**References:**

Abstract: The integration of Soft Computing techniques in traditional real-time systems is a promising approach to cope with the growing complexity of real-world applications. A power station is a complicated multivariable controlled plant, which consists of boiler, turbine, generator, power network and loads. The demands being placed on Control & Instrumentation engineers include economic optimization, practical methods for adaptive and learning control, software tools that place state-of-art methods as a result. Neural network applications are explored in Measurement and Control. In real-time systems, Information plays a vital role for the efficient operation and maintenance in a power station. However there are limitations on making available information online due to instrumentation limitation, hazardous environment condition etc. The Furnace Exit Gas Temperature (FEGT) is an important design and operating parameter. The furnace of a boiler is such a zone where online measurement of temperature is difficult because of high temperature and adverse conditions. Considering the complexity of power plant operating condition and number of parameters involved, the best solution to this problem lies in adopting the Neural Networks to measure FEGT in a 500 MW Thermal Power Plant. Also, Steam temperature Control is one of the most challenging control loops in a power plant boiler because it is highly nonlinear and has a long dead time and time lag. The Superheated temperature is to be controlled by adjusting the flow of spray water to within +/- 10 deg C during transient states and +/- 5 deg C at the steady state. A neural network based Model Predictive Control (MPC) is proposed in this paper

Keywords: Neural Networks, Boiler, Superheater temperature, Furnace exit gas temperature, Measurement Control, Power Plant

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Authors: T. K Sai, K. A. Reddy

Paper Title: Neural Network Applications in a Power Station

22. The Effects of Auto-Tuned Method in PID and PD Control Scheme for Gantry Crane System

Abstract: Gantry crane system is a mechanism in heavy engineering that moves payload such container from one point to another. Generally, experienced operators or experts are required to control manually the gantry position while minimizing the payload vibration or swing oscillation. Therefore, those manpower has to be trained in order to operate the gantry crane system safely and efficiently. Thus, to overcome this problem, a feedback control scheme has been utilized in the system. In this paper, PID and PD controllers are introduced for controlling the trolley displacement and the swing oscillation in the gantry crane system. PID controller is designed for tracking the desired position of the trolley whereas PD controller is implemented to minimize the payload oscillation. The PID and PD parameters are tuned by the auto-tuning method. Simulation results have demonstrated satisfactory response based on control system performances.

Keywords: Auto-tuned, Gantry Crane System, PID and PD Controller, Payload Oscillation, Trolley Position.

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Keywords: 12-lead ECG signal, simulated signal, baseline noise, Mean Square Erro (MSE).

References:

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References:

Keywords: 12-lead ECG signal, simulated signal, baseline noise, Mean Square Erro (MSE).

References:
Paper Title: **Investigation of Single Cart Gantry Crane System Performance using Scheduling Algorithm**

**Abstract:** This paper investigates the implementation of two types of scheduling algorithm to obtain the best performances of the Single Cart Gantry Crane System (GCS). In this research, Deadline Monotonic Priority Assignment (DMPA) and Earliest Deadline First (EDF) scheduling algorithm are chosen to be implemented. The main ideas of this approach is to find the schedule that more compatible and provide more stable result for the system. The Cart performances will be analyzed in term of Settling Time (TS) and Overshoot (OS). In this study, a simple PID controller that acts as a basic control structure is used. The application of TRUETIME kernel block also is implemented to be executed in a MATLAB environment. It has been demonstrated that implementation of these two algorithms will help this system to be more stabilized according to appropriate execution time.

**Keywords:**
Cart Gantry Crane System, Deadline Monotonic Priority Assignment, Earliest Deadline First, True-time.

**References:**

Authors: Khaleel J. Hammadi, Ahmed R. Ajel, Salam Ibrahim Kadhim

**Paper Title:** **Characteristic Performance Analysis of Electrical Machine with Faults via Wavelet Transforms**

**Abstract:** This paper presents a novel approach to electrical machine current signature analysis based on wavelet transform of the stator current by using labview programming. The novelty of the proposed method lies in the fact that by using WT method the inherent non stationary nature of stator current can be accurately considered. The key characteristics of the proposed method are its ability to provide feature representations of multiple frequency resolutions for faulty modes, ability to clearly differentiate between healthy and faulty conditions, and its applicability to non-stationary signals. Successful implementation of the system for rotor bar breakage is demonstrated here. The condition monitoring of the electrical machines can significantly reduce the costs of maintenance by allowing the early detection of faults, which could be expensive to repair. The applied method is the wavelet transform which utilizes the results of the stator current.

**Keywords:** Electrical machine, Mechanical fault, Wavelet transform, NI USB

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134-138

26. **References:**
139-142
Abstract: One of the statistical methods of class discriminant is linear discriminant analysis. This method, by using statistical parameters, obtain a space which by using available discriminating information among class means does classification act. By using distributing Distances, extended analysis linear discriminant to its heteroscedastic state. At this state, to make classes more separating of available separating information among covariance matrix classes including classes mean is using. In this article, because of using new scattering matrices which are defined based on boundary and non-boundary patterns, classes overlapping in Spaces which obtains has been reduced. On the other hand, using new scattering matrices brings about increasing classification rate so, the done experiments confirm improvement of classification rate.

Keywords: boundary linear discriminant analysis, Boundary and non-boundary patterns, CHernoff criteria, linear discriminant analysis.

References:

Authors: Ali Yaghoubi, Hamid Reza Ghaifari
Paper Title: Improved LDA by using Distributing Distances and Boundary Patterns

Abstract: The behavior of natural body simply considering is Benchmarking is a common activity for many people, in its simplest form comparison of Ideal performance against another similar activity, perhaps just to check that we are getting the best results or the best value for a particular item. In addition the reflect of benchmarking on several scopes such as: High-quality results -Improving efficiency -Meeting or exceeding needs Adding value - Better tools for enhanced decision making. This happens in all walks of life. There are many different perspectives here are two examples: "Benchmarking is a continuous systematic process for evaluating the products, services and work processes of organizations that are recognized as representing best practices for the purpose of organizational improvement.” (Spendolini, J.M. The Benchmarking Book. American Management Association. New York 1992, p.2 )Or “Benchmarking is a performance measurement tool used in conjunction with improvement initiatives; it measures comparative operating performance of companies and identifies the 'best practices. 'Benchmarking creates value by:• Focusing on key performance gaps;• Identifying ideas from other companies;• Creating a consensus to move an organization forward;• Making better decisions from a larger base of facts.” (Mission Statement for The Procurement And Supply-chain Benchmarking Association (PASBA), Benchmarking is most effective where a large amount of data derived from practical experience, rather than theory, can be drawn together to identify best practice or establish a range of targets. Data accumulated by trade associations or organizations with international experience is often the best basis. But don’t ignore data derived from your own experiences, benchmarking against historical performance of the same activity also has its uses. While direct comparison between identical activities is most straightforward, some lateral thinking can create benchmarks for particular
operations or processes in one sector that can, to some extent, be applied to similar operations in different sectors

**Keywords:** benchmarking, Spendolini, PASBA, accumulated, straightforward.

**References:**