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Abstract: WIMAX is a wireless communications standard designed to provide 30 to 40 megabit-per-second data rates, [1] with the 2011 update providing up to 1 Gbit/s [1] for fixed stations. The name "WIMAX" was created by the WiMAX Forum, which was formed in June 2001 to promote conformity and interoperability of the standard. The forum describes WiMAX as "a standards-based technology enabling the delivery of fast mile wireless broadband access as an alternative to cable and DSL". [2] This paper aim to spot the light on how node trajectory within the WiMAX cell may effects the network performance, also how QoS parameters and the choice we make in the network configuration might changes how the network react and how it may have a direct effect on its performance.

Keywords: component; WIMAX, QoS, Trajectory.

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Abstract: This paper proposes a simplified Space Vector Modulation technique which is used to control an inverter that supplies voltage to an induction motor. A simplified dynamic model of an induction motor model was also designed and voltage is supplied to it using SVM technique. A step by step design procedure with the help of matlab and Simulink made the complexity of the system simpler than existing models. This paper briefly explains design of space vector modulation technique and induction motor modeling. With the help of appropriate interfacing the design method will be used in industrial applications where the space vector modulation technique is used to achieve smooth control of speed and torque. Finally, on-line starting of the designed Induction Motor model was simulated. Moreover comparison of existing and the simplified SVM-based direct torque control method was simulated and results were shown.

Keywords: Decoupling, Dynamic Model, Reference frame, Squirrel-cage.

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Abstract: Rogue base station attack can compromise the privacy of user equipment (UE) in LTE networks. To address this issue, we propose a rogue base station identification protocol to protect UE privacy. Our protocol utilizes the mobile property of the UE and is designed based on the observation that rogue base station can only cover a small area. We use the measurements of UE in different locations to estimate the power and location of the base stations. The UE also tracks the signatures of each legitimate base station. If the base station is already verified by the detection protocol, then the UE connects to the base station according to LTE standard. For any new appearing base stations, it sends the power of the base station and the GPS location itself to a cloud server to verify the legitimacy of the base station. The cloud server maintains a database of real base stations. Our proposed protocol does not need to change existing LTE standard and no base station modification is required. 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 successfully detect rogue base stations and avoid sending privacy data to rogue base station.

Keywords: user equipment (UE) in LTE networks, identification protocol to protect UE privacy, GPS, legitimacy, NS3 LTE module.

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International reference to specialized algorithm for solving a set of global optimization problems. The algorithms of the objective functions. The performance of the designed algorithm is tested on specific benchmarking functions namely; Rastrigin function, Rosenbrock function, Schwefel’s function 2.22, Schwefel’s function 2.21 and Sphere's function.

The computational results have demonstrated that the performance of Genetic Algorithms with Powell’s Method is much improved specific benchmarking functions. The use of a hybrid search method approach allows it to speed up the learning of the system with faster convergence rates. The Genetic Algorithm with Local Search Procedure (GALSP) is applied for solving exam timetabling problem. The GALSP seems to be a promising approach and is comparable to specialized algorithm for solving a set of global optimization problems. The algorithms of these processes have been designed and presented in the paper.

Keywords: Genetic algorithms, local search procedure, evolutionary theory, search methods.

References:
Keywords: Microsoft Project, (hospital, commercial, etc.), software, management

References:
2. A Risk Management System For Preconstruction Phases Of Large Scale Development Projects In Developing Countries by Mohammad Baydoun, Project Manager, Millennium Development International & DBA Candidate, Grenoble Ecole de Management.
5. Methodology of Risk And Uncertainty Management In Construction’s Technological And Economical Problems by Darius Migilinskas, Leonas Ustinovicius.

Authors: K. Joshil Raj, S Siva Sathya, Kalyan Nandi

Paper Title: A Modified Group Search Optimizer for Feature Selection and Parameter Determination of SVM

Abstract: Support vector machine (SVM) is a popular pattern classification method with many diverse applications. Group Search Optimizer (GSO) is a new population based optimization algorithm inspired by animal searching behavior for developing optimum searching strategies to find out solutions for continuous optimization problems. This paper presents an experimental analysis of modifications to classical GSO & studies its effects on a GSO-SVM hybrid combination for feature selection and kernel parameters optimization. In the proposed algorithm, three modifications are introduced over classical GSO to improve its global search mechanism. The quality and effectiveness of the proposed methodology has been evaluated on standard machine learning datasets.

Keywords: Evolutionary algorithm; Group Search Optimizer; SVM; Support Vector Machine; Machine learning; Feature Selection; Kernel parameters.

References:

Authors: G.Sai Manoj, T.Sreevatsav, V.Vidya Priyanka, S.V.K.S. Prasad, P.Rajesh

Paper Title: An Area Efficient Low Power High Speed Pulse Triggered Flip Flop Using Pass Transistor Logic

Abstract: The performance of flip-flop is an important element to determine the efficiency of the whole synchronous circuit. This paper presents an efficient explicit pulsed static single edge triggered flip flop with an improved performance and overcomes the drawbacks of the implicit type pulsed flip flops. The proposed flip flop is having a structure of explicit pulse-triggered with a modified true single phase clock latch based on signal feed through scheme. The proposed flip-flop is compared with existing explicit pulsed single edge triggered flip-flops in terms of power, speed and area. Simulation results based on PTM 90nm CMOS technology reveal that the proposed design features the best power, area and delay performance in several FF designs under comparison.

Keywords: Explicit, Edge-Triggered, Feed through, Latch, Synchronous

References:
Authors: Hussein Jaddu, Amjad Majdalawi

Paper Title: Recursive Approximation Method for Solving Constrained Nonlinear Optimal Control Problems Using Legendre Polynomials

Abstract: A computational method is presented to solve a nonlinear quadratic optimal control problem subject to terminal state constraints, path inequality constraints on both the state and the control variables. The method is based on using a recursive approximation technique to replace the original constrained nonlinear dynamic system by a sequence of constrained linear time-varying systems. Then each of constrained linear time-varying quadratic optimal control problems is approximated by a quadratic programming problem by parameterizing each of the state variable by a finite length Legendre polynomials with unknown parameters. To show the effectiveness of the proposed method, simulation results of two constrained nonlinear optimal control problems are presented.

Keywords: Nonlinear constrained quadratic optimal control problem; Iterative Technique; Legendre polynomials; State parameterization.

References:
stereotypes. Traditionally, stereotypes are defined as patterns or schemes via which people organise their behaviors and activities. Psychologists have been extremely interested in the persuasion techniques used by advertisers. The implicit question that most of such studies have entertained is whether advertising has become a force molding cultural mores and individual behaviors, or whether it constitutes no more than an "mirror" of deeper cultural tendencies within urbanised contemporary society. The one thing which everyone agrees is that advertising has become one of the most recognisable and appealing forms of social communication to which everyone in society is exposed. However, it could be understood from the results that the producers, generally tend to use their power and ideology to change people’s behaviour and thought. Some time more efficiently is used, old stereotypes and do not try to change people’s behavior but do conversaly use their power to preserve previous behaviour try to reinforces this behaviour, shown this like some traditional value what confirmed customers identity. When we consider gender stereotypes we look at notions about the supposedly traditional behaviours of men and women and the characteristics and standards of this behaviour, as grounded in our culture and society. This idea allows to producers make consumer feeling to this society and psychologically be involved into story what is shown by advertisers. Culture covers human values, action patterns, ideas, and material and artificial surrounding which enable interaction among people. The content of culture determines the particular qualities of certain groups of people, and it also determines their consumer characteristics. That is why it is essential to understand the way in which culture reaches individuals. In today’s information area, the media are the primary means for the transmission and reproduction of cultural information. They shape the image of culture in people’s consciousness. In addition this study provides analyses of some ads, using different ways of interpretations. All materials are taken from Latvian media.

Keywords: Social discourse analysis, stereotypes, gender, customer behaviour, print advertisement, Image, Fairclough-3D, Krees and van Leeuwen’s grammer, Gestalt psychology, culture.

References:
6. A. Lebedev-"Ljubimov --.
8. Harald Business Review September. 2013-"Seven steps to strategy making"

Authors: Anil Kumar, Vijay Mittal
Paper Title: Recursive Approximation Method for Solving Constrained Nonlinear Optimal Control Problems Using Legendre Polynomials

Abstract: A new approach for the implementation of quality philosophy Zero Quality Defects with usage of the Poka-Yoke method in the Assembly Line has been presented. The possibility of usage of mistake proofing device is connected with monitoring and improvement of operations in the process. The Poka-Yoke method of preventing errors by putting limits on how operation can be performed in order to force the correct completion of the operation has been presented. The possibility of implementing of the Poka-Yoke method as a factor of improving operation in the process in the assembly line has been shown. The aim of method Poka-Yoke in those practical examples is to eliminate or minimizes human error in manufacturing process and management as a result of mental and physical human imperfections.

Keywords: Lever Combination Switch; Mistake proofing; Poka Yoke; Mindarika Company Limited

References:
5. www.mindagroup.com

Authors: Vallippan Ramam, Sundresan Perumal
Paper Title: Matlab Implementation Results: Detection and Counting of Young Larvae and Juvenile by Image Enhancement and Region Growing Segmentation Approach

Abstract: This paper describes techniques to perform efficient and accurate recognition in larvae images captured from the hatcheries for counting the live and dead larvae’s. In order to accurately model small, irregularly shaped larvae and juvenile, the larvae images are enhanced by three enhancement methods, and segmentation of larvae and...
juvenile is performed by orientation associated with each edge pixel of region growing segmentation method. The two vital tasks in image analysis are recognition and extraction of larvae and juvenile from an image. When these tasks are manually performed, it calls for human experts, making them more time consuming, more expensive and highly constrained. These negative factors led to the development of various computer systems performing an automatic recognition and extraction of visual information to bring consistency, efficiency and accuracy in image analysis. This main objective of this paper is to study on the various existing automated approaches for recognition and extraction of objects from an image in various scientific and engineering applications. In this study, a categorization is made based on the four principle factors (Input, Segment the larvae, Recognition, Counting) with which each approach is drive. The achieved result of recognition and classification of larvae is around 85%. All the results achieved through matlab implementation are discussed in this paper are proved to work efficiently in real environment.

Keywords: Enhancement, Segmentation and Counting

References:

Authors: Navdeep Sharma, Sameer Sharma, S.P. Guleria, N.K. Batra

Paper Title: Mechanical Properties of Urea Formaldehyde Resin Composites Reinforced with Bamboo, Coconut and Glass Fibers

Abstract: Composite materials, plastics and ceramics have been the dominant emerging materials from last thirty years. Polymeric materials reinforced with natural and synthetic fibres such as coconut, bamboo, jute glass, carbon and aramid provide advantages of high stiffness, good thermal, acoustic insulating properties, excellent formability and strength to weight ratio as compared to conventional construction materials, i.e. wood, concrete, iron and steel. The increase interest in using natural fibres as reinforcement in plastics is to substitute the conventional synthetic fibres in some structural applications and it has become one of the main concerns to study the potential of using natural fibres as reinforcement for polymers. In this research paper, seven different fiber reinforcement polymer composite were fabricated by wet hand-lay-up method using short coconut, short bamboo and short glass fibers bound with amino resin like urea formaldehyde. The urea formaldehyde was selected due to its low cost, less weight, easier to field fabricate, long durability and high temperature withstand ability. The different mechanical properties like density, tensile strength, hardness, flexural strength and percentage elongation of specimens were calculated and were compared with the pure urea formaldehyde.

Keywords: Composite, Polymeric materials, coconut, bamboo, glass fibers, urea formaldehyde

References:
Virtual Solar Cell Tester System Based on Modified Interval Type-2 Fuzzy Logic Controller

Abstract: The most fundamental of solar cell characterisation techniques is the measurement of cell efficiency. Standardised testing allows the comparison of devices manufactured at different companies and laboratories with different technologies to be compared. This paper presents a new design of solar cell testers for monocrystalline, polycrystalline, cadmium telluride (CdTe), and copper indium diselenide (CIS) cells. Each cell is tested for efficiency and categorized accordingly into four groups (A to D). A Virtual Reality (VR) model was built to simulate the system, keeping in mind real world constraints. Two photoelectric sensors were used to make detections for both the testing process and the robot movement. A handling robot with vacuum end-effectors was designed based a Modified Interval Type-2 Fuzzy Logic Controller (MIT2FLC) and command line programming for construction, editing, and simulation of the MIT2FLC for control of movement for solar cell and then distributed the cells according to the categories of test for efficiency. The MIT2FLC guides the trajectory of the robot according to the results of the efficiency testing. It was seen that the system worked very well, with the testing process and the robot movement interacting smoothly. The robot trajectory was seen to be highly accurate, and the pick and place operations were done with great precision.

Keywords: Handling robot, Solar cell tester, Virtual reality, a Modified Interval Type-2 Fuzzy Logic Controller (MIT2FLC).

References:
21. Y. I. Al Mashhadany, S. Adel, A. Abdul sattar, A. Khuder, “Novel Controller for PUMA 560 Based on PIC Microcontroller”, has been accepted for publication in Wullenia Journal, Vol. 21, Iss. 4, 2014
Abstract: Plagiarism of programming source codes is an undesirable situation in the many fields of software development world. Especially in educational field, it is obviously realized that plagiarism in programming courses increases consistently. The aim of this study is attempting to answer questions such as “which codes are similar?”, “what similarity ratios are?” in order to prevent plagiarism among university students who attend programming courses. While developing the proposed methodology, N-gram similarity calculation method and Vector Space Model (VSM) were considered. Information Retrieval (IR) System and Cosine Normalization (CN) methods were utilized to calculate similarity ratios. Experimental study was performed on the dataset yielded by changing source code examples in different forms. The results obtained provide convincing evidence that the study is fit the purpose.

Keywords: Plagiarism source code, n-gram, vector space model, cosine normalization.

References:

Abstract: The ad hoc network is a continuously self-configuring and decentralized network where nodes communicate with each other without the fixed network infrastructure or centralized administration. TCP (Transmission Control Protocol) is a connection-oriented transport protocol that provides a reliable exchange of data streams. Implementation of TCP in wireless networks has many challenges such as the issues of the efficiency and TCP fairness problem. The fairness means that network nodes (users or applications) are receiving a fair share of overall resources. In this paper, we study the problem of maintaining the fairness for TCP connections in ad hoc networks. Our research has been made to present the TCP fairness problem in MANET (ad hoc mobile networks) while considering the sending and receiving of traffic. Achieving fairness in these networks is a challenge due to specific characteristics of an ad hoc environment and it is necessary to adapt TCP for ad hoc networks. The primary goal of this paper is to present fairness in ad hoc networks using combinations of different TCP variants and routing protocols. We evaluated the results of our research by using the proper simulation method.

Keywords: Ad hoc, MANET, VANET, TCP, fairness.

References:
7. Yi Lu, Yuhui Zhong, Bharat Bhargava: ‘Packet Loss in Mobile Ad Hoc Networks’, Center for Education and Research in Information Assurance and Security, Department of Computer Sciences, Purdue University, Wes Lafayette, USA.
Abstract: From last few decades the human body infections and diseases are growing in exponential manner. As per the medical report, in every three months a new infection or viral comes in existence with some new explode to effect the human race. To test whether the infection is in body or not, Blood tests are the common methods. Most of the diseases are beyond the doctor’s study or some recently spread virus infected the blood or human body. In such cases doctors use to give the treatment of other disease having same symptoms or same blood test cases. In this paper we are trying to make such a system which will spread awareness among doctors about the infections. The proposed system will work on the basis of fuzzy logic and neural network with the help of inference engine and its rules. The simulation will be done using Matlab. The proposed approach of using fuzzy logic and inferences with neural networks training in blood samples on real test cases of blood report is a novel idea.

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

References:

Keywords: EEG, Mind wave, Biosensor.

References:
Abstract: Various practical systems capable of extracting descriptive decision making knowledge from data have been developed and evaluated. Techniques that represent knowledge about classification tasks in the form of decision trees are focused on. A sample of techniques is sketched, ranging from basic methods of constructing decision trees to ways of using them non-categorically. Some characteristics that suggest whether a particular classification task is likely to be amenable or otherwise to tree-based methods are discussed. Many urban land cover types show spectral similarity in remote sensing data. Further, the finer the spatial resolution of the data, the larger is the number of detectable subclasses within classes. This high within-class spectral variance of some classes results in multimodal distribution of spectra and may decrease their spectral separability. Hence, the existing traditional hard classification techniques which are parametric type do not perform well on high resolution data in the complex environment of the urban area as they expect datasets to be distributed normally. The aim of this paper is to investigate a non-parametric classifier as an alternative approach to classify an image data of a semi urban area.

Keywords: Remote Sensing, Image Classification, Parametric Classifier, Non-parametric and Decision Tree Classifier

References:
A novel scheme has been studied and demonstrated for Monte Carlo simulations of diffusion-reaction processes. The new algorithm skips the traditional small diffusion hops and propagates the diffusing particles over long distances through a sequence of super-hops, one particle at a time. By partitioning the simulation space into non-overlapping protecting domains each containing only one or two particles, the algorithm factorizes the N-body problem of collisions among multiple Brownian particles into a set of much simpler single-body and two-body problems. Efficient propagation of particles inside their protective do-mains is enabled through the use of time-dependent Green’s functions (propagators) obtained as solutions for the first-passage statistics of random walks. The resulting Monte Carlo algorithm is event-driven and asynchronous; each Brownian particle propagates inside its own protective domain and on its own time clock. The algorithm reproduces the statistics of the underlying Monte-Carlo model exactly. The new algorithm is efficient at low particle densities, where other existing algorithms slow down severely. Thus we have analyzed the application of this algorithm in the charge distribution and the capacitance detection.

Keywords:
Monte Carlo Simulation, Charge distribution, capacitance, Markov chain

References:

Authors: Merina Devi Hemann, N.V. Uma Reddy
Paper Title: An Energy-Efficient, Delay-Aware, Lifetime-Balancing and Data Collection Protocol for Heterogeneous Wireless Sensor Networks
Abstract: The technique that is used in this paper is to make it more simpler for wireless sensor networks problem. To make the energy more efficient a protocol is used that is called EDAL. It is rebuilt from the existing system called OVR which uses NP-hard algorithm. To make more prominent a centralized heuristic is design to make the computational overhead more smaller and to detect the dead nodes. As it has some limitation distributed heuristic is design which is the best for large scale networks.

Keywords: Power consumption, delay, energy efficient, heuristic algorithm, wireless sensor networks.

References:

Authors: Sweta, Sushmitha Reddy I, Maddipatla Mounika, Priyanka Agrawal, Pallavi G. B

Paper Title: A Survey to Justify the Need for Carpooling

Abstract: In India people mostly prefer road transportation to move around places. The increasing number of vehicle on road lead to several issues as congestion, environmental degradation and energy problems. Research and development have been progressively done in this field to reduce the environmental degradation and for the better utilization of fossil fuels. Different approaches and techniques to solve these issues emerged which address fields of emission reduction, increase efficiency of vehicle, energy alternative, decrease the road density with care of safety and comfort, etc. In this paper survey on these emerging drifts and escalating are mentioned. In this paper, we have identified carpooling as one such solution to provide user, flexibility in time, enjoyable, efficient and safe ride.

Keywords: Drivers, Efficiency, GHG emission, HOV [high occupancy vehicle], Passenger, Road density, Safety.

References:
5. Vivek Tyagi, Member, IEEE, Shivkumar Kalyanaraman, Fellow, IEEE and Raghubram Krishnapuram, Fellow, IEEE, IBM India Research Laboratory, India “Vehicular Traffic Density State Estimation Based on Cumulative Road Acoustics”.
17. Kavita Sheoran (Guide) Assistant Professor / Reader, Vaibhav Jatana, Rachit Gulati, Nikhil Ahuja and Ankit Kapoor, Student, CSE Department Maharaja Surajmal Institute of Technology “Intelligent Transportation System Architecture for a Carpool System”. Published in International Journal of Computer Applications.
24. Authors: Shubha Agarwal, Govind Narain Bajpai

Paper Title: The Brand Extension Strategy: An Analysis

Abstract: Branding has emerged as a top management priority in the last decade due to the growing realization that brands are one of the most valuable intangible assets that firms have. This paper identifies some of the influential work in the branding area, highlighting what has been learned from an academic perspective on important topics such as brand positioning, brand integration, brand equity measurement, brand growth, and brand management. It is also discussed how branding and society affect each other. Based on the knowledge of how branding theories have been developed as dependent variables of each other and the society, we are able to form a better understanding of the past, the present, and the future of branding.

Keywords: top management priority, most valuable intangible assets, branding area, brand positioning, brand integration, brand equity measurement, brand growth.

References:

25. Authors: H. Molissine, M. Kourchi, H. Bouhouc F. Debbagh

Paper Title: Perturb and Observe (P&O) and Incremental Conductance (INC) MPPT Algorithms for PV Panels

Abstract: In this work we present a study on the comparison between two MPPT algorithms: Perturb and Observe (P&O) and Incremental Conductance (INC). We base our approach on the difference between computed results using an adapter bloc Buck DC-DC converter. The MPPT algorithms are combined with it to complete the PV simulation system. We show that the MPPT control with both P & O and INC keeps the system power operating point at its maximum. For this purpose the conventional P&O, the converter input reference voltage is perturbed in fixed steps until the maximum power is reached. However, depending on the step size, the system operating point will oscillate around the MPP resulting in a loss of energy.

Keywords: Photovoltaic (PV), Maximum Power Point Tracking (MPPT), Perturb and Observe (P&O), Incremental Conductance (INC).

References:
1. F. Ansari, A. K. Jha’ Maximum power point tracking using perturbation and observation as well as incremental conductance algorithm’ international journal of research in engineering & applied sciences, issn: 2294-3905, PP 19-30, 2011.