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Paper Title: Optimization of Real Time Model using Linear Programming and MATLAB

Abstract: The Reliance Corporation is a large, fully integrated petroleum company based in India. The company produces most of its oil in its own oil field. A large distribution network is used to transport the oil to the company's refineries and then to transport the petroleum products from the refineries to Reliance's distribution centres. This work represents transportation problem and addresses the transportation flow of refined & processed oil from the refineries to the company's distribution centres. The aim is to achieve the minimum cost of transportation flow, since the cost minimization directly relates to the company's profitability of which is representing operation efficiency. The transportation model is converted into linear programming problem and is solved using MATLAB software. The models were studied based on a real time data model and as example of transportation flow of oil from various refineries to various distribution centres.

1.

Keywords: Transportation, Linear Programming, MATLAB, OIL Refinery.

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Paper Title:

An Approach to Construct Learner Profile Using Ontology

Abstract: E-Learning is the use of technology to enable people to learn anytime and anywhere. E-Learning depends on learner profile for the retrieval of relevant learning content to the learner. Learner profile describes the way in which a student learns best. It includes information on learner's knowledge, interest, learning preferences and styles, goals, background etc. One of the main issues in constructing learner profile is semantic web. Ontology is used as a standard knowledge representation for the semantic web. This paper suggests an approach to construct ontology based learner profile including static and dynamic characteristics of the learner and update it automatically. Finally an efficient fuzzy semantic retrieval process is proposed for the efficient retrieval of information from learner profile.

Keywords: E-Learning, Semantic Web, Learner Profile, Ontology, Fuzzy Semantic Retrieval.

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Paper Title: An Efficient Random Iterative Based Particle Swarm Optimization for Intrusion Detection

Abstract: In this paper, an efficient intrusion classification has been proposed by the help of association rule and random iterative based particle swarm optimization NSL-KDD dataset has been used for the experimentation. This is done by the separation of nodes by receiving and sending. Then it is examined for malicious behavior. RIPSO is applied then to examine the approved threshold value for the detection of different intrusion types defined. If the value obtained after RIPSO iteration passed the threshold assigned, then it will be categorized as the specific intrusion and type will identified. Denial of Service (DoS), User to Root (U2R), Remote to User (R2L) and Probing (Probe) attacks is considered in this paper for intrusion detection. The results show the improvement in detection as compared to the previous method. The average accuracy obtained by our approach is 91.3 %. Index

Keywords: RIPSO, Intrusion Detection, DoS, U2R, R2L and Probe.

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Paper Title: A Symmetric 9 - Level Multilevel Inverter with Minimum Number of Device

Abstract: In this paper, an improved technique for Multilevel Inverter. The improved technique using less number of switches than conventional Cascade H- Bridge topology which enhances system performance decreases system complexity and also reduces total cost of the inverter. The main objective of this paper is to increase figure of output level by reducing number of power switches without any complexity in the circuit. The merit of this improved modified technique is to reduce THD and High output voltage level. Multicarrier PWM based techniques used for controlling, firing circuit of switching device. In this paper comparison between proposed improved technique and conventional cascaded H-Bridge inverter done. The number of output voltage level is nine. Simulation is done in MATLAB 2010b environment and the waveforms are obtained. The results are analysed using MATLAB/SIMULINK software.

Keywords: Multicarrier PWM (MC-PWM), Cascaded H-Bridge, THD, reduced switches.

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Paper Title: A Fuzzy Based Power Factor Corrected Bridgeless Converters Fed Bldc Motor

Abstract: This paper presents a power factor corrected (PFC) bridgeless (BL) converters-fed brushless direct current (BLDC) motor drive as a cost-effective solution for low-power applications. An approach of speed control of the BLDC motor is by controlling the dc link voltage of the voltage source inverter (VSI). This facilitates the operation of VSI at fundamental frequency switching by using the electronic commutation of the BLDC motor which offers reduced switching losses. A Bridgeless configuration of the various non-isolated converters such as (Buck-boost, CUK, SEPIC) are proposed which offers the elimination of the diode bridge rectifier thus reducing the conduction losses associated with it. The performance of the proposed drive is studied and simulated in MATLAB/Simulink environment.

Keywords: Bridgeless (BL) converters, Power factor correction (PFC), Brushless dc motor, PI controller, Fuzzy controller.

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Authors: Derya Demirkol, Tamer Dag, Taner Arsan

Paper Title: Comparison of Various Indoor Positioning Systems Techniques

Abstract: Localization is one of most important topic. GPS is perfectly using outside environment. However it is not possible to use indoor environment. In this paper, Triangulation, Maximum Likelihood and Fuzzy Logic algorithms were developed. Algorithms work with same environment and same conditions. Algorithms were compared each other in order to find better accuracy.

Keywords: Indoor positioning, triangulation, maximum likelihood, fuzzy logic, received signal strength, wireless

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