✉ info@ijindex.org

ijindex
digital directory of Indian journals

Toggle navigation ≡

- About Us
- Services
- ISSN Directory
- Journal Catalogue
- Add journal
- Contact Us

Journal Detail

International Journal For Modern Trends In Science and Technology

ISSN Print:
EISSN Online: 2455-3778
Cheif Editor: Dr. V. Joshi Manohar
Subject : Multidisciplinary
Index Term : IJMTST, 2455-3778
Journal Website : click here
Description : International Journal for Modern Trends in Science and Technology (IJMTST) (ISSN:2455-3778) is an international peer reviewed, online journal Published monthly by Engineering and Science Research Publication. IJMTST represents the new standard in scholarly Publishing: a liberal open access policy, fast and high quality peer review that brings Publishing to the doorstep of every research and student. IJMTST would take much care in making your research paper published without much delay with your kind cooperation. Our journal aims to bring out the research talent and the works done by scientists, academia, engineers, practitioners, scholars, post graduate students of Engineering and Science. This journal aims to undertaking and promoting the scientific research in a broader sense. This journal welcomes the submission of your research papers that meet the general criteria of significance and scientific excellence in the field of Engineering, Science and Technology. IJMTST has a primary aim to publish research being conducted and carried out in the field of Engineering, Science and Technology as a whole. Submitted articles will be reviewed by technical committee members of the journal. All submitted papers should report original, previously unpublished and will be peer reviewed.

Type : Print
Rs -0.00

Subscribe

Issue/Article　　Aims & Scope　　Editorial Board　　Manuscript submission & Author instructions　　Abstracted/Indexed in

Volume No.	Issue No.	Title	Authors	Abstract
2	8	Performance Analysis of MIMO Equalization Techniques with Highly Efficient Channel Coding Schemes	Neha Aggarwal, Shalini Bahel, Teglovy Singh Chohan and Jasdeep Singh	To combat the wireless fading impairment in the high network demand environment, various coding schemes have been implemented. MIMO techniques are still the powerful techniques along with source coding. This paper focuses on coherent implementation of high performance turbo codes with MIMO equalization techniques. It is proposed to achieve optimum BER value at very low values of SNR in a noisy environment.
2	8	Access Policy Management For OSN Using Network Relationships	Dr. D. Bujji Babu, P. Farhana and Sk. Anjaneyulu	In the online social networks (OSN) users and resources are interconnected via various types of relationships. The relationships are one-to-one, one-to-many, many-to-one, and many-to-many like that. Now a day's online social networks plays crucial role to monitor and to control the access of the resources. In the OSN, online provider should be enabled to specify which access permission can be granted in terms of existing relationships. In this work we used user-to-user relationship based access

				control model. Access control policies decide which permissions can be granted to the requested users based on their requests and we are using two path checking algorithms namely DFS and BFS to determine the path existence between users as well as the requested user is authenticated user or not.
2	8	Performance Analysis of MIMO Equalization Techniques with Highly Efficient Channel Coding Schemes	Neha Aggarwal, Shalini Bahel, Teglovy Singh Chohan and Jasdeep Singh	To combat the wireless fading impairment in the high network demand environment, various coding schemes have been implemented. MIMO techniques are still the powerful techniques along with source coding. This paper focuses on coherent implementation of high performance turbo codes with MIMO equalization techniques. It is proposed to achieve optimum BER value at very low values of SNR in a noisy environment.
2	7	Reactive Power Sharing Droop Control Strategy for DG Units in an Islanded Microgrid	Alladi Gandhi; D. Ravi Kishore;	The proposed method mainly includes two important operations: error reduction operation and voltage recovery operation. The sharing accuracy is improved by the sharing error reduction operation, which is activated by the low-bandwidth synchronization signals. However, the error reduction operation will result in a decrease in output voltage amplitude. Therefore, the voltage recovery operation is proposed to compensate the decrease., due to increasing the demand of electricity as well as rapid depletion of fossil fuels, and the government policies on reduction of greenhouse gas emissions , renewable energy technologies are more attractive and various types of distributed generation sources, such as wind turbine generators and solar photo voltaic panels are being connected to low-voltage distribution networks. Micro grid is an integrated system that contain s distributed generation sources, control systems, load management, energy storage and communication infrastructure capability to work in both grid connected and island mode to optimize energy usage. The paper presents a advanced control technique for a micro grid system which works efficiently under a decentralized control system.
2	7	Voltage Flicker Analysis and its Mitigation by STATCOM for Power Quality Improvement	Mekathoti Ravi Kumar; D. Ravi Kishore;	Voltage flicker is considered as one of the most severe power quality problems (especially in loads like electrical arc furnaces) and much attention has been paid to it lately. The reason for this disturbance is mainly due to the large nonlinear loads such as electric arc furnaces. Due to the latest achievements in the semiconductors industry and consequently the emergence of the compensators based on voltage source converters, FACTS devices have been gradually noticed to be used for voltage flicker compensation. This paper covers the contrasting approaches; dealing with the voltage flicker mitigation in three stages and assessing the related results in details. Initially, the voltage flicker mitigation, using FCTCR (Fixed Capacitor Thyristor Controlled Reactor), was simulated. Secondly, the compensation for the Static Synchronous Compensator (STATCOM) has been performed. The voltage flicker compensation by 8– pulse as well as 12 – pulse static synchronous compensator (STATCOM) has been performed. This paper deals with the voltage flicker mitigation and reduction in total harmonic distortion (THD) and compared the results in detail. The obtained results show that STATCOM is very efficient and effective for the compensation and mitigation of voltage flicker and harmonics all the simulation results have been performed on the MATLAB Software.
2	7	Implementation of Three phase SPWM Inverter with Minimum Number of Power Electronic Components	Muthyala Sarath; V S N Narasimha Raju; Seshagiri Boppana;	In the past decades, the researchers have dealt with the conventional topology, which possesses sum switches of Multilevel Inverter is applied to PWM method. The present research work has been introduced a new method of multilevel inverter using reduced switches is applied with PWM technique. In introduction part the conventional new multilevel inverter & switching pattern are explained. In second part PWM technique of proposed work and circuits is explained. The width of this pulses are modulated in order to obtain inverter output voltage control and to reduce its harmonic content. Sinusoidal pulse width modulation or SPWM is the most common method in motor control and inverter application. Conventionally, to generate the signal, triangle wave as a carrier signal is compared with the sinusoidal wave, whose frequency is the desired frequency.
2	7	Modeling of Micro Turbine for Rapid Prototyping	A.K.Matta;	A micro turbine is for harnessing energy from an airflow, which is generated by body motion. The energy is transformed into usable electrical energy and thus providing power for portable electrical devices. The turbine is flown axial and rotates in the same direction independent of the incoming airflow. This paper presents an overview of work performed to date on modeling of micro turbine for rapid prototyping that can automatically take solid models from computer Aided Design data in the form of stl, iges files.
2	7	Power System Stabilizer with Induction Motor on Inter Area Oscillation of Inter Connected	J. Srinu Naik; Murthy M V N;	This paper describe the problem of initializing the dynamic models of the induction motor for inter area oscillation of power system studies. To further investigate the effects of dynamic loads on power systems stability, the effectiveness of conventional as well as modern linear controllers is tested and compared with the variation of loads. The effectiveness is assessed based on the damping of the dominant mode and the analysis in this paper highlights the fact that the dynamic load has substantial effect on the system damping. This paper presents an analysis to investigate the critical parameters of the induction motor like inertia and stator and rotor resistance, and reactance which effect of the stability of the system. The examination is showed on the both a standard IEEE 10-machine system with dynamic loads. To further investigate the Power System Stabilizer with Induction Motor on Inter Area Oscillation of Inter Connected by using the MATLAB/SIMLINK Model.
2	7	Emerging Trends in Recruitment Process Outsourcing	Venkata Naga Manjula;	With the changing times the roles of HR are also changing and became more diversified. The competitive pressures wrought by the new economy call for a change in the role of the "Human Resources" function. In today's business environment HR must become a leader in identifying new business opportunities, defining business strategy and corporate priorities, and preparing the organization for continuous and often disruptive changes. Similar is the case with the profile of recruitment – having limited perspective changes and gets a new face having many changes and broader perspective. Hiring good people is one of the most significant contributions of the HR function. To find the right person who would fit the job specification is increasingly becoming difficult. Thus, many specialized firms that totally deal with the hiring process have come up as a boon for the organizations, giving birth to the "Recruitment Process Outsourcing" (RPO). The objective of the RPO's is to provide effective recruitment, reducing the hiring costs significantly to generate greater results.
2	7	Note on Co Ideals in Ternary Semigroups	V. Jyothi; M. Dhana Lakshmi; S. Tulasi;	In this paper we study properties of co-ideal in the ternary semigroup 0 z ,. ▢ ▢
2	7	Analysis of Fuel Cell	Koyyagura Kiran; D. Ravi	In this paper new topologies and interleaving modulation concepts for multilevel DC-DC boost converter enabling a significantly less loss and a reduced chip size of the power semiconductors are proposed.

		Based Multilevel DC-DC Boost Converter for Induction Motor	Kishore;	The distributed generation (DG) systems based on the renewable energy sources have rapidly developed in recent years. These DG systems are powered by micro sources such as fuel cells, photovoltaic (PV) systems, and batteries. Fuel cells are considered to be one of the most promising sources of distributed energy because of their high efficiency, low environmental impact and scalability. Non-isolated high step-up DC-DC converters are required in the industrial applications. Many of these conventional DC–DC converters have the disadvantages of operating at high duty-cycle, high switch voltage stress and high diode peak current. A three-level step up converter is implemented to boost the fuel cell stack voltage of 96V to 340V. The proposed converter consists a system of fuel cell based Multilevel DC-DC converter with PI controller is modeled and simulated by using Matlab/Simulink.
2	7	Adaptive Control Scheme for PV Based Induction Machine	M. Siva Kumar; D. Ramesh;	An adaptive control scheme for maximum power point tracking of a single-phase grid-connected photovoltaic system is presented. The difficulty on design a controller that may operate a photovoltaic system on its maximum power point (MPP) is that, this MPP depends on temperature and solar irradiance, ambient conditions that are time-varying and difficult to measure. A solution using an on-line sliding mode estimator is presented. It estimates three different parameters that depend on solar irradiance and temperature, eliminating the necessity of having any sensor for these environmental variables. It is capable of estimate time-varying parameters. A complete analysis was done taking into account the non-linearity's showed by the closed-loop system. An adaptive law was found to substitute a perturbation bound and also to eliminate possible chattering due to the discontinuous controller term. Computer simulations are presented to show the good performance of the controller. The controller detects the deviation of the actual trajectory from the reference trajectory and corresponding changes the switching strategy to restore the tracking. Prominent characteristics such as invariance, robustness, order reduction, and control chattering are discussed in detail. Methods for coping with chattering are presented. Both linear and nonlinear systems are considered The proposed concept can be implemented to adaptive control scheme for induction machine using Matlab/Simulink software.
2	7	Comparison of Buck-Boost and Cuk Converters for BLDC Drive Applications with PFC	Neelam Amarnath Reddy; V. Ganesh Kumar;	The devices generally used in industrial, commercial and residential applications need to undergo rectification for their proper functioning and operation. Hence there is a need to reduce the line current harmonics so as to improve the power factor of the system. This has led to designing of Power Factor Correction circuits. This project presents a power factor corrected (PFC) bridgeless (BL) buck–boost converter-fed brushless direct current (BLDC) motor drive as a cost-effective solution for low-power applications. The conventional PFC scheme of the BLDC motor drive utilizes a pulse width-modulated voltage source inverter (PWM-VSI) for speed control with a constant dc link voltage. This offers higher switching losses in VSI as the switching losses increase as a square function of switching frequency. A BL configuration of the buck–boost converter is proposed which offers the elimination of the diode bridge rectifier, thus reducing the conduction losses associated with it. A PFC BL buck–boost converter is designed to operate in discontinuous inductor current mode (DICM) to provide an inherent PFC at ac mains. The simulation results are presented by using Matlab/Simulink software. The proposed concept can be extended with cuk converter for BLDC drive applications using Matlab/Simulink software
2	8	Effects on Study MHD Free Convection Flow Past a Vertical Porous Plate with Heat Generation and Chemical Reaction	G. Vidyasagar and B. Ramana	This paper deals with the combined soret effect of thermal radiation and heat generation on the MHD free convection heat and mass transfer flow of a viscous incompressible fluid past a continuously moving infinite plate. Closed form of solution for the velocity, temperature and concentration field are obtained and discussed graphically for various values of the physical parameters present. In addition, expressions for the skin friction and Sherwood number is also derived and finally discussed with the graphs.
2	8	Study of Characteristics of DFIG Based Wind Turbine	Shaik Naveed, Muralikrishna. N and Sk. Saidavali	In this paper the study of active power, reactive power, stator current, rotor current and grid voltage characteristics of doubly fed induction generator based wind turbine are studied. The pulses for the stator and rotor are applied by using a hysteresis current controller. The main drawback of wind energy conversion system is that it is highly nonlinear. To overcome this problem a fuzzy controller on rotor side and a discrete PID controller on stator side are applied. The active and reactive powers are controlled by this nonlinear strategy. The active power is maximized by these both controllers. The entire simulation is conducted on mat lab/simulink. The results obtained are satisfactory.
2	8	Keys to Succeed in Implementing Total Preventive Maintenance (TPM) and Lean Strategies	Rishi J P, Dr. Ramachandra C G and Dr. T R Srinivas	Competition is global and it continues to get more intense, with changes in technology, introduction of new and differentiated products and techniques. These changes are faster than what can be implemented. Profits are no longer driven by prices but with costs.[1] Customers have access to just about anything at their finger tips. The expectation like quick response, lower prices, flexible orders and quality products, is increasing every day from the customers. Our OEM's (Original Equipment Manufacturers) are searching for new methods of doing business and they expect their suppliers, like us to do the same. The challenge in front of us is how we respond effectively to these changing trends in the industry for our survival & growth. Change is the only certainty and the above is very much applicable to any business to achieve and sustain competitive edge. It is evident that organizations, which are innovative and visionary, have successfully implemented the change, realizing its business strategies would lead to their long term survival
2	8	An Investigation into Shopping Behavior of Customers towards Modern Retail Stores in Vijayawada	Sandeep Kumar Machavolu and Dr. M. Srinivasa Narayana	The study is intended to analyze the general shopping habits and behaviors of customers towards modern retail stores. The objective of the study is to understand the factors affecting the shopping behavior of customers towards modern retail stores. The research is aimed at exploring the reasons for preferring modern retail stores to traditional kirana store, their usual preferences in purchasing various items, their behavior in planning the visits to these stores, the benefits sought by them shopping at these stores and their overall opinion towards these modern retail stores. A survey with a sample size of 120 from Vijayawada city was conducted using a structured questionnaire. The data so collected was analyzed using statistical tools and the results were presented. The findings of the study prove that there is a long way for modern retailers to go. There is ample scope for these modern retailers to capture the market, as a majority of the middle-class just started shifting their preference from kirana stores to modern retail formats. Stores also require introducing in-store sales promotions to turn casual shoppers into serious buyers. Stores may also require luring window-shoppers. Stores also require offering value-added services such as order-by-phone, mail orders and home-delivery to mitigate the image that stores are not conveniently located. Providing improved training for the staff proves to be very effective in serving shoppers better.
2	8	Report on	Mr. M.	In this paper, Carry Select Adder (CSA)architecture are proposed using parallel prefix adder. Instead of

		Ripple Carry Adder Power Delay using Brent Kung (BK) Adder	Mahaboob Basha and Jhansi Pabbathi	using 4-bit Ripple Carry Adder (RCA), parallel prefix adder i.e.,4-bit Brent Kung (BK) adder is used to design CSA. Adders are key element in digital design, performing not only addition operation, but also many other function such as subtraction, multiplication and division. Ripple Carry Adder (RCA) gives the most complicated design as-well-as longer computation time. The time critical application use Brent Kung parallel prefix adder to drive fast results but they lead to increase in area. Carry Select Adder understands between RCA and BK in term of area and delay. Delay of RCA is larger therefore we have replaced it with Brent Kung parallel prefix adder which gives fast result. Power and delay of 4-bit RCA and 4-bit BK adder architecture are calculated at different input voltage. This paper describes comparative performance of 4-bit RCA and 4-Bit BK parallel prefix adder designed using TANNER EDA tool.
2	8	Design and implementation of Closed Loop Control of Three Phase Interleaved PFC AC-DC Converter	K. Vasantha Lakshmi and P.C. Chakravarthy	A single-phase, three-level, single-stage power-factor corrected AC/DC converter operated under closed loop manner is presented. That operates with a single controller to regulate the output voltage and the input inductor act as a boost inductor to have a single stage power factor correction with good output response. The paper deals with a new single stage three level ac-dc converter which performs both power factor correction and voltage regulation in a single stage. The proposed converter has two separate controllers, one for power factor correction and the other for regulating the output voltage. A comprehensive review of the existing single stage topologies has been carried out. Then the operating principle, control scheme and the design of the new converter are presented. The proposed converter is having an input power factor close to unity and better voltage regulation compared to the conventional ac-dc converter topologies. Proposed topology is evaluated through Matlab/Simulink platform and simulation results are conferred.
2	8	Modified CSKA Application in the Floating Point Adder using Carry Skip Adder Hybrid Structure	Mr. N. Md. Mohasinul Huq, Mr. M. Mahaboob Basha and Subbamma Kalingiri	In this paper, we present a carry skip adder (CSKA) structure that has a higher speed yet lower energy consumption compared with the conventional one. The speed enhancement is achieved by applying concatenation and incrementation schemes to improve the efficiency of the conventional CSKA (Conv CSKA) structure. In addition, instead of utilizing multiplexer logic, the proposed structure makes use of AND-OR-Invert (AOI) and OR-AND-Invert (OAI) compound gates for the skip logic. The structure maybe realized with both fixed stage size and variable stage size styles, wherein the latter further improves the speed and energy parameters of the adder. Finally, a hybrid variable latency extension of the proposed structure, which lowers the power consumption without considerably impacting the speed, is presented. This extension utilizes a modified parallel structure for increasing the slack time, and hence, enabling further voltage reduction. The proposed structures are assessed by comparing their speed, power, and energy parameters with those of other adders using a 45-nmstatic CMOS technology for a wide range of supply voltages. The results that are obtained using HSPICE simulations reveal, on average, 44% and 38%improvements in the delay and energy, respectively, compared with those of the Conv-CSKA. In addition, the power–delay product was the lowest among the structures considered in this paper, while its energy–delay product was almost the same as that of the Kogge–Stone parallel prefix adder with considerably smaller area and power consumption. Simulations on the proposed hybrid variable latency CSKA reveal reduction in the power consumption compared with the latest works in this field while having a reasonably high speed.
2	8	An Isolated 3 Phase Multilevel Inverter for PV Cell Applications	Snigdha Lanka and Satish Kumar Kesireddy	This study presents a novel topology for multilevel inverters so called cascaded transformer inverter (CTRSI). This topology consists of one DC source and several single-phase transformers. Each single-phase transformers generates three levels with four semiconductor switches and only two switches for all transformers alter the direction of single DC source. Whereas each single-phase transformers in conventional cascaded transformer multilevel inverter includes more switches. Hence, CTRSI has the advantage of a reduced number of components compared with conventional cascaded transformer multilevel inverter. Simulation results carried out by MATLAB/SIMULINK. The results show that the proposed inverter topology is able to reach high-quality output voltages. THD of output voltage is verified using FFT analysis tool
2	8	Modeling and Simulation of Cascaded Multilevel Inverter fed PMSM Drive with PV Stand-Alone Water Pumping System	S. Sireesha and T. Bhavani	In this paper is to present PV system directly coupled to water pumping system for such areas where no facility for electricity. Solar PV system have, PV Module, non-isolated Boost converter, Sinusoidal Pulse width modulation inverter and pumping system through PMSM drive. The system is controlled by PI controller. DC-DC converter is controlled in order to extract the maximum power from Solar PV system. The implementation of multilevel inverters improved the torque and speed response under various operating conditions. PI controller is employed as speed controller and PWM technique is used to trigger switches of multilevel inverter. PV water-pumping is highly competitive compared to traditional energy technologies and best suited for remote site applications that have small to moderate power requirements. The proposed system consists of solar PV panel, a boost converter, a three phase VSI (Voltage Source Inverter) and a PMSM coupled with a centrifugal water pump. By using MATLAB/SIMULINK software.
2	8	Area Efficient Pulsed Clocks & Pulsed Latches on Shift Register Tanner	Mr. T. Immanuel and Sudhakara Babu Oja	This paper introduced a design and implementation of shift register using pulsed latches and flip-flops. As flip-flop based shift registers requires a clock signal to operate. Multistage flip-flop processes with high clock switching activity and then increases time latency. Flip-flops also engages fifty percent power out of total circuit power in clocking. To reduce such power consumptions and to achieve area optimization flip-flops are replaced by pulsed latches. The design is implemented with 250nm technology in Tanner EDA Tool. With Vdd=1.8V, Freq=100MHz. Average power of total circuit is 0.465uW and delay of 0.312 us.
2	8	Smart Millennials and their Changing Shopping Trends: A Case of Millennial Students in Nellore	Sandeep Kumar Machavolu and Dr. M. Srinivasa Narayana	Shopping habits among people change with the change in generation. Each generation is characterized by unique habits and preferences. Understanding the changing trends becomes paramount for retailers to suit their business strategies to the new-age customers. On the other hand, reforms in the industry and pressures from competition throws open new vistas for today's retailers. In this connection, a study has been initiated to understand the changing shopping trends among millennials. The chief objective of the study is to find the changing habits of millennials in terms of their online buying, the penetration of smart-phone into their purchase process and their satisfaction towards online purchase. A sample of 135 respondents in Nellore was approached for a survey and after a few rejections; data from a total of 128 respondents was gathered using a structured questionnaire. The data gathered was thoroughly analyzed using statistical tools and the findings were presented. The results of the study state that the new-gen shoppers who are termed as millennials are coming up with unprecedented shopping habits and preferences. Most of the millennials own a smartphone or two which has disrupted the shopping trends in the market. Smart Millennials, the ones who belong to millennial generation and who own a smartphone are ubiquitous. Smartphones have penetrated deep into their personal lives. Smart millenials are welcoming experiments in product delivery and payment methods, spurring online

				shopping trend. However, there exist a few cases, if not many in which these smart millennials are slurred by a few online retailers by way failed delivery of product ordered. The study concludes that smart millennials are going to make a huge pie of the market in the years ahead and with the changing times comes the need for the retailers to fine-tune business as well.
2	8	Novel Adaptive Hold Logic Circuit for the Multiplier using Add Round Key and Parallel AES	Mr. S. Mohan Das and Prem Joshua M	Digital multipliers are among the most critical arithmetic functional units in many applications, such as the Fourier transform, discrete cosine transforms, and digital filtering. The through put of these applications depends on multipliers, if the multipliers are too slow, the performance of entire circuits will be reduced. The negative bias temperature instability effect occurs when a PMOS transistor is under negative bias (Vgs = −Vdd), increasing the threshold voltage of a PMOS transistor and reducing the multiplier speed. Similarly, positive bias temperature instability occurs when an NMOS transistor is under positive bias. Both effects degrade the speed of the transistor and in the long term, the system may be fail due to timing violations. Therefore, it is required to design reliable high-performance multipliers. In this paper, we implement an aging aware multiplier design with a novel adaptive hold logic (AHL) circuit. The multiplier is able to provide the higher throughput through the variable latency and can adjust the adaptive hold logic (AHL) circuit to lessen performance degradation that is due to the aging effect. The proposed design can be applied to the column bypass multiplier.