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1.	**Authors:** S. Angeline Julia, N. Snehalatha, Paul Rodrigues **Paper Title:** Comparison of Software Architecture Styles Using Quality Attributes	

Abstract: Every software system has an architecture because every system can be shown to be composed of components and relations among them. The Software architecture of a program is the structure of the system, which comprise software elements, the externally visible properties of those elements, and the relationships among them. Architecture styles plays a dominant role in solving complex systems. Here we analyzed these architecture styles using the quality attributes and the survey is given. From our analysis we conclude that software architecture which is flexible is very important in developing complex distributed applications.

Keywords: Software Architecture, Styles, Quality Attributes.

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2.	**Authors:** A. Brillia, D. Jagadiswary, R. Muthu Venkata Krishnan **Paper Title:** Implementing Cryptographic Techniques in Message Passing Interface Systems	

Abstract: In the concept of Message Passing Interface (MPI) chatting and file transmission the decryption part will be done automatically. Here three types of keys are used; they are public, private and secret key. Keys are displayed to the destination only if they accept the request or else displaying of key is not possible in the destination side and also it won't give or establish the Connection. In largely spread clusters, computing nodes are naturally deployed in a variety of computing sites. The Information processed in a spread cluster is communal among a group of distributed processes or client by high-quality of messages passing protocols (e.g. message passing interface - MPI) running on the Internet. Because of the open available nature of the Internet, data encryption for these large-scale distributed clusters becomes a non-trivial and challenging problem. We improved the security of the MPI protocol by encrypting and decrypting messages sent and received among computing nodes. We are listening carefully on MPI rather than more protocols because MPI is one of the most accepted communication protocols for cluster computing environments. From among a multiple of MPI implementations, we selected MPICH2 developed by the Argonne National Laboratory. Design goal of MPICH2 - a commonly use MPI implementation - is to join portability with high presentation. we gives a security enhanced MPI-library with the standard MPI interface, data communications of a conservative MPI program can be secured without converting the program into the corresponding secure report. We included encryption algorithms into the MPICH2 library so that data in secret of MPI applications could be readily preserved without require modifying the source codes of the MPI applications. This system use Sandia Micro Benchmark and Intel MPI Benchmarks to evaluate and compared the performance of original MPICH2 and Enhanced Security MPICH2. According to the performance estimation, ES-MPICH2 provides protected Message Passing Interface by give up sensible system performance.

Keywords: Secret key, Encryption, MPI, Parallel Computing, Cryptosystem.

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3.

Authors: **Riya Mary Thomas**

Paper Title: **Survey of Bacterial Foraging Optimization Algorithm**

Abstract: Bacterial Foraging Optimization Technique is used in optimization for grid computing as they get their inspirations from evolutionary idea of natural evolution. It has been broadly accepted as a global optimization algorithm of current interest for distributed optimization and control. This algorithm is inspired by the social foraging behavior of Escherichia coli. Bacterial Foraging Optimization (BFO) algorithm is a novel evolutionary computation algorithm. It is proposed based on the foraging behavior of the Escherichia coli (E. coli) bacteria living in the human intestine. The BFO algorithm is a biologically inspired computing technique. This paper presents a broad overview on the formalization of works contributed by Bacterial Foraging Optimization Algorithm to the field of grid scheduling.

Keywords: Bacterial Foraging Optimization Algorithm, Grid Computing, Chemotaxis.

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4.

Authors: **D. Aravind, K. Soujanya, T. Naveen Kumar**

Paper Title: **Ann Based SVC Switching At Distribution Level for Minimal Injected Harmonics**

Abstract: Electrical distribution system suffers from various problems like reactive power burden, unbalanced loading, voltage regulation and harmonic distortion. Though DSTATCOMS are ideal solutions for such systems, they are not popular because of the cost and complexity of control involved. Phase wise balanced reactive power compensations are required for fast changing loads needing dynamic power factor correcting devices leading to terminal voltage stabilization. Static Var Compensators (SVCs) remain ideal choice for such loads in practice due to low cost and simple control strategy. These SVCs, while correcting power factor, inject harmonics into the lines causing serious concerns about quality of the distribution line supplies at PCC. This paper proposes to minimize the harmonics injected into the distribution systems by the operation of TSC-TCR type SVC used in conjunction with fast changing loads at LV distribution level. Fuzzy logic system and ANN is used to solve this nonlinear problem, giving optimum triggering delay angles used to trigger switches in TCR. The scheme with Artificial Neural Network (ANN) is attractive and can be used at distribution level where load harmonics are within limits.

Keywords: ANN, Fuzzy logic control, Harmonic distortion, Reactive power, Static Var Compensators.

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5.

Authors: **S. M. Sorte, S. M. Sheikh**

Paper Title: **Stress Analysis And Design Optimization Of Crankpin**

Abstract: The stress analysis and design optimization of a single cylinder crankpin of TVS Scooty Pep crankshaft assembly are discussed using stress analysis in this paper. Three-dimension models of crankshaft and crankpin forces were created using Pro/ENGINEER software and software ANSYS was used to analyze the stress status on the crankpin. The maximum deformation, maximum stress point and dangerous areas are found by the stress analysis. The relationship between the crank rotation and load acting on crank pin would provide a valuable theoretical foundation for the optimization and improvement of crankpin and engine design. [2]

Keywords: Stress analysis; crankshaft; crankpin.

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6.

Authors: **Gajendra Singh Chandel, Ankesh Bhargava**

Paper Title: **Identification of People by Iris Recognition**

Abstract: Biometrics is a best medium of identification .iris recognition used to recognize people by iris. I present the new method of iris recognition "iris recognition by neural network". In this method first we collect the iris images and using image processing after this calculate the length of iris from left to right and top to bottom. Finally we use neural network for training and testing purpose .We have selected training algorithm and setting different parameter for training. CASIA iris database used in this work. Many types training and testing we get different results. We get best accuracy is 97.5%.

Keywords: Biometrics, iris recognition, neural network, Feature extraction.

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7.

Authors: **Jijy George, Sandhya N, Suja George**

Paper Title: **Search On Web- From Classical Web to Semantic Web**

Abstract: The WWW is a vast information resource with enormous potential. The retrieval of relevant information from the web is a major issue because it is difficult for the machines to process and integrate the information. Internet is growing very fast as pages are added in a very fast pace. Searching on the web for a specific topic results in hundreds of pages and it is up to the user to extract the useful information from the result set. This paper presents insight on how current search engine works and also the potential gain of using current search engines. This paper further gives an overview of the challenges surrounding current search techniques and looks at the need of an intelligent information retrieval system on web. This paper also reviews the foundations required to make the search engine an intelligent one and also gives an insight on concepts like metadata, RDF, URI, XML, triples and ontologies.

Keywords: Semantic web, RDF, XML, Triples, Ontologies.

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Authors: **A. Duraisamy, K. Somasundaram, M. Sathiyamoorthy**

Paper Title: **Protection of Data from Cipher-Text Only Attack Using Key Based Interval Splitting**

Abstract: Modifications of Arithmetic Coding (AC) is to improve the security in two methods are: RAC (Randomized Arithmetic Coding) and KSAC (AC with Key-based interval splitting). For the security, encryption uses AC that is based on the inability of the opponent to distinguish between the encryption of one plaintext from the encryption of another. Chosen plaintext attacks are insecure in RAC, because same key is used to encrypt different messages even random key is used for compress every messages. The new encryption scheme is used for improve security in RAC that is the encryption is performed by a bit wise X-OR of the compressed output with the pseudorandom bit sequence for chosen plaintext attacks. Then encryption scheme is used for improve security in KSAC that is the encryption is performed by a bit wise X-OR of the compressed output with the pseudorandom bit sequence for chosen plaintext attacks.

Keywords: AC, RAC, KSAC, Plaintext, Ciphertext, Plaintext attacks, AES.

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9.	**Authors:**	**S. Vamshi Kumar, P. Raghuvedran, K. Sri Vidya Savithri**
	Paper Title:	**Modeling and Analysis of a Dynamic VAR Compensator for Wind Energy Conversion System**
	Abstract: In wind energy conversion system voltage control and reactive power compensation is the main problem. This paper presents vector oriented control of three-phase voltage source pulse width modulation (PWM) inverter which aims to control of active and reactive power injected into the grid. A wind driven Induction Generator in Self excited mode feed power to load through a ac-dc-ac converter. The modulation index of the inverter is adjusted using vector oriented control to enhance the active power export and reduce the reactive power requirement. The scheme is modeled in Matlab/Simulink and simulation is carried out to study the performance at varying wind speed. **Keywords:** Self-excited induction generator (SEIG), voltage source inverter (VSI), wind energy conversion system (WECS). **References:** 1. Mahmoud M. Neam, Mohamed A. Ghazy" A Novel Method of Evaluating Performance Characteristics of a Self-Excited Induction Generator" ,IEEE Transactions on Energy Conversion 2009 , Volume: 24,No.2,pp 358-365. 2. Tudorache, T, Melcescu, L, Paturca, S.V." Finite Element Analysis of Self-Excited Induction Generator for Isolated Small Power Wind Turbines ", International Conference on Clean Electrical Power, 2007,pp 656-661. 3. Szabo, L.; Biro, K.A.; Nicula, C.; Jurca, F." Simulation of Wind Turbine Driven Autonomous Squirrel Cage Induction Generators ", 11th International Conference on Intelligent Engineering Systems, 2007,pp 213-218. 4. Hazra, S.; Sensarma, P.S.," Self-excitation and control of an induction generator in a stand-alone wind energy conversion system ",IET Transactions on Renewable Power Generation, Volume: 4,No.4,pp 383-393. 5. Sharaf, A.M.; Aljankawey, A.; Altas, I.H," A Novel Voltage Stabilization Control Scheme for Stand-alone Wind Energy Conversion Systems ",International Conference on Clean Electrical Power,pp 514-519. 6. Neam, M.M.; El-Sousy, F.; Ghazy, M.A.; Abo-Adma, M.A," DC-cus voltage control of three-phase ac/dc PWM converters for renewable energy applications ",IEEE International Conference on Electric Machines and Drives ,pp 1682-1691. 7. Housheng Zhang; Yanlei Zhao," Vector Decoupling Controlled PWM Rcetifier for Wind Power Grid-Connected Inverter ",International Conference on Energy and Environment Technology, Volume: 2,pp 373-376. 8. Yang Ye; Kazerani, M.; Quintana, V.H," Modeling, control and implementation of three-phase PWM converters ",IEEE Transactions on Power Electronics ,Volume: 18 ,No.3,pp 857-864,2003. 9. Lopes, L.A.C.; Almeida, R.G," Wind-driven self-excited induction generator with voltage and frequency regulated by a reduced-rating voltage source inverter ",IEEE Transactions on Energy Conversion, Volume: 21,No.2,pp 297-304,2006.	**35-39**
	Authors:	**T. Mekala, N. Madhu Suganya**
	Paper Title:	**Secure Transaction Using Dynamic Session Key**
	Abstract: Cryptography is a concept to protect data during transmission over wireless network. Cryptography is used in information security to protect information from unauthorized or accidental disclosure while the information is in transmitting (either electrically or physically) and while information is in storage. The information could be accessed by the unauthorized user for malicious purpose. Therefore, it is necessary to apply effective encryption/decryption methods to enhance data	

10.	security. The existing system limits only the total number of users from the unknown remote host to as low as the known remote host. It uses the white list values for tracking legitimate users. But the cookie value expires after certain time period. So the attackers may use different browsers or may try on another machine or may retry after certain time. If any malicious attacks occurred the authenticated user does not know about that. The proposed system uses two algorithms known us Bio-Metric Encryption Algorithm (BEA), Minutiae Extraction Algorithm (MEA). It uses Multi Bio-metric features for authentication purpose. And also this system dynamically generates a new Session Key for each transaction. So the proposed system will protect Data Confidentiality, Data Integrity, Authentication, Availability, Access control of information over the network. **Keywords:** Biometric Encryption Algorithm, Finger print, Minutiae Extraction Algorithm, Session key, Biometrics. **References:** 1. Mansour Alsaleh, Mohammad Mannan, and P.C. van Oorschot, Member, IEEE "Revisiting Defenses Against Large-Scale Online Password guessing Attacks" IEEE transactions on dependable and secure computing, vol. 9, no. 1, january/february 2012. 2. S.M. Bellovin, "A Technique for Counting Natted Hosts," Proc. ACM SIGCOMM Workshop Internet Measurement, pp. 267-272, 2002. 3. Y. He and Z. Han, "User Authentication with Provable Security against Online Dictionary Attacks," J. Networks, vol. 4, no. 3, pp. 200-207, May 2009. 4. DHOLE S.A, PATIL V.H "Minutiae based Fingerprint Identification" Journal of signal and Image Processing ISSN: 0976-8882 & E-ISSN: 0976-8890, Volume 3, Issue 3, 2012, pp. -122-125. 5. W. Y. Leng and S. M. Shamsuddin "Fingerprint Identification using Discretization Technique" International Journal of Computer and Communication Engineering 6 2012. 6. Colin Soutar, Danny Roberge, Alex Stoianov, Rene Gilroy and B.V.K. Vijaya Kumar "Biometric Encryption". 7. D. Ramsbrock, R. Berthier, and M. Cukier, "Profiling Attacker Behavior following SSH Compromises," Proc. 37th Ann. IEEE/IFIP Int'l Conf. Dependable Systems and Networks (DSN '07), pp. 119-124, June 2007. 8. SANS.org, "Important Information: Distributed SSH Brute Force Attacks," SANS Internet Storm Center Handler's Diary, http:// isc.sans.edu/diary.html?storyid=9034, June 2010. 9. "The Top Cyber Security Risks," SANS.org, http://www.sans.org/top-cyber-security-risks/, Sept. 2009. 10. C. Stoll, The Cuckoo's Egg: Tracking a Spy through the Maze of Computer Espionage, Doubleday, 1989. 11. Nimithachama, Dept. of Electrical & Computer Engineering Clemson University, "Fingerprint image enhancement and minutiae extraction". 12. Dr.R.Seshadri,T.RaghuTrivedi, "Efficient Cryptographic Key Generation using Biometrics" Int. J. Comp. Tech. Appl., Vol 2 (1), 183-187. 13. Sunil V. K. Gaddam, and Manohar Lal "Efficient Cancellable Biometric Key Generation Scheme for Cryptography", International Journal of Network Security, Vol.11, No.2, PP.6169, Sept. 2010. 14. A. K. Jain, L. Hong, S. Pantanki and R. Bolle, "An Identity Authentication System Using Fingerprints", Proc of the IEEE, vol, 85, no.9,1365-1388, 1997. 15. Tanmay Bhattacharya, Sirshendu Hore, Ayan Mukherjee and S. R. Bhadra Chaudhuri, "A Novel data encryption technique by genetic crossover of robust biometric key and session based password", International Journal of Network Security & Its Applications (IJNSA), Vol.3, No.2, March 2011.	**40-44**
11.	**Authors:**	**N. Bharath Choudary, D. Ramakrishna Sharma, P. Ramesh Chandra**
	Paper Title:	**Dynamic Stability Improvement for Non- Conventional Energy Resources by Using STATCOM Control Scheme**
	Abstract: This paper presents a control scheme based on a static synchronous compensator (STATCOM) to achieve both voltage control and damping enhancement of a grid-connected integrated 80-MW offshore wind farm (OWF) and 40-MW ma- rine-current farm (MCF). The performance of the studied OWF is simulated by an equivalent doubly-fed induction generator (DFIG) driven by an equivalent wind turbine (WT) while an equivalent squirrel-cage rotor induction generator (SCIG) driven by an equivalent marine-current turbine (MCT) is employed to simulate the characteristics of the MCF. A damping controller of the STATCOM is designed by using modal control theory to contribute effective damping characteristics to the studied system under different operating conditions. A frequency-domain approach based on a linearized system model using Eigen value techniques and a time-domain scheme based on a nonlinear system model subject to various disturbances are both employed to simulate the effectiveness of the proposed control scheme. It can be concluded from the simulated results that the proposed STATCOM joined with the designed damping controller is very effective to stabilize the studied system under disturbance conditions. The voltage fluctuations of the AC bus subject to the active-power variations of the studied system can also be effectively controlled by the proposed control scheme. **Keywords:** Dynamic stability, marine-current farm, offshore wind farm, static synchronous compensator. **References:** 1. S. E. B. Elghali, R. Balme, K. L. Saux, M. E. H. Benbouzid, J. F. Charpentier, and F. Hauville, "A simulation model for the evaluation of the electrical power potential harnessed by a marine current turbine," IEEE J. Ocean. Eng., vol. 32, no. 4, pp. 786–797, Oct. 2007. 2. W. M. J. Batten, A. S. Bahaj, A. F. Molland, and J. R. Chaplin, "Hydrodynamics of marine current turbines," Renewab. Energy, vol. 31, no. 2, pp. 249–256, Feb. 2006. 3. L. Myers and A. S. Bahaj, "Simulated electrical power potential harnessed by marine current turbine arrays in the alderney race," Renewab.Energy, vol. 30, no. 11, pp. 1713–1731, Sep. 2005. 4. H. Chong, A. Q. Huang, M. E. Baran, S. Bhattacharya, W. Litzenberger, L. Anderson, A. L. Johnson, and A. A. Edris, "STATCOM impact study on the integration of a large wind farm into a weak loop power system," IEEE Trans. Energy	**45-52**

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Authors: **Atharva Girish Puranik, Abhijit Gohokar, Ravi Batheja, Nirman Rathod, Ojasvini Bali**

Paper Title: **Design of Electricity & Energy Review Dashboard Using Business Intelligence and Data Warehouse**

Abstract: The advances in the computer and electronics industry along with the widespread of on-the-move internet has lead an enormous of data being generated on daily basis. Such large data stored in the datacenters is critical for businesses to analyze and plan future business strategies. Business Intelligence is thus used to transform the large raw data into meaningful and useful information. In this work the concept of Business Intelligence in combination with Data warehousing is applied to design an Electricity & Energy Review Dashboard by taking a scenario which involves the use of large raw data for electricity and energy production and consumption in US for last few years.

Keywords: Unstructured data, Business Intelligence (BI), Competitive intelligence, Data Warehouse, MicroStrategy.

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13.

Authors: **Babita Gupta, S. V. Phanidhar, B. Venkatesh**

Paper Title: **Development of VSI Based STATCOM for Voltage Improvement & Reactive Power Compensation**

Abstract: Voltage fluctuations caused by rapid industrial load changes have been a major concern for both power companies and customers in the area of power quality. The fast response of the Static Compensator (STATCOM) makes it an efficient solution for improving power quality in distribution systems.This paper describes a model for a PWM-based STATCOM used in a distribution system for mitigation of voltage fluctuations produced by an Electric Arc Furnace (EAF).The analyzed system is modeled using MATLAB/Simulink Power system Blockset (PSB), including a complete STATCOM model with its power circuits and its control system. The complete model is validated by field test.Static and dynamic performance of STATCOM is evaluated and voltage fluctuation mitigation studies are performed and discussed. The voltage fluctuation mitigation is obtained by measurements and according to international standards.

Keywords: Arc Furnaces. Flicker. Harmonics. Power Quality. STATCOM.

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10. Anexo a la Resolución ENRE 99/97. Base Metodológicapara el Controlde la Emisión de Perturbaciones. Etapa 2.

14.

Authors: **Avisha Sharma, Sanyam Anand**

Paper Title: **An Efficient Technique of De-Noising Medical Images Using Neural Network and Fuzzy -A Review**

Abstract: Medical imaging technology is becoming an important component of large number of applications such as diagnosis, research, and treatment. Medical images like X-Ray, CT, MRI, PET and SPECT have minute information about heart brain and nerves. These images need to be accurate and free from noise. Noise reduction plays an important role in medical imaging. There are various methods of noise removal such as filters, wavelets and thresholding based on wavelets. Although these methods produced good results but still have some limitations. Considering and analyzing the limitations of the previous methods our research presents neural networks and fuzzy as an efficient and robust tool for noise reduction. In our research we use BPNN as the learning algorithm which follows the supervised learning and fuzzy. The proposed research use both mean and median statistical functions for calculating the output pixels of training patterns of the neural network and fuzzy provide promising results in terms of PSNR and MSE. The work focuses on study and performance evaluation of these categories using MATLAB 7.14.

Keywords: Neural Network, Image De-noising, BPNN, PSNR, Fuzzy Logic.

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15.

Authors: **Shabnam, Sumit Kumar Yadav**

Paper Title: **Enhanced Coherency Technique for XML Keyword Search-A Review**

Abstract: Keyword search techniques which use advantages of XML structure make it simpler for ordinary users to query XML databases, but latest approaches to processing these queries depend on heuristics that are ultimately ad hoc. These approaches often retrieve not correct answers, overlook appropriate answers, and cannot rank answers properly. To remove these problems for data-centric XML, we propose enhanced coherency ranking, a domain and database design-independent ranking method for XML keyword queries that is based on an extension of the concept of mutual information. Keyword search is widely recognized as a best way to retrieve information from XML data. In order to specifically meet users search requirements, we proof how to effectively return the targets that users intend to search for. We mold XML document as a set of interconnected object-trees, where each object contains a sub tree to represent a concept in the real world. The work focuses on study and performance evaluation of these categories using MATLAB 7.14.

Keywords: XML, DATABASE, DATA MINING, Enhanced Coherency.

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16.

Authors: **Sunil V. Desale, S. V. Deodhar**

Paper Title: **Lean-Management approach to Construction Engineering & Management**

Abstract: This paper was written to fill a vacuum of research on the fundamental principles of site construction management. Efficient material management is essential in managing a productive and cost efficient site. In his working career, the author has been observing inefficient labour productivity practices resulting from poor site material management and this paper attempts to rectify those using techniques such as zoning which have been construed with deductive logic and a heuristic approach. These zones being outside storage, staging areas, and inside storage. Each has a unique function in relation to site material management. Using these areas as the basis of the study, heuristic principles are deduced and illustrated with a case study project accompanied by numerous photographs.

Keywords: Construction material, lean management, cost control.

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