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Paper Title: Integrating Kano Model and Herzberg Two Factor Theory to Unveil the Third Quality Factor of Patient Satisfaction in a Multispecialty Outdoor Medical Centre

Abstract: Perception of quality by customers remains most important determinant of success of a healthcare unit, influencing consumption of service by improved compliance, better satisfaction levels and stronger bondage between healthcare team and patients. Whereas Herzberg two factor theory was designed originally to discover hygiene and motivating factors for employees, it could be used similarly to identify such factors in a customer population of an industry. Kano model to study service quality attributes considers both functional and non functional data analysis to classify attributes in four categories viz. must- be, reverse, indifferent and attractive. Present study was conducted on 243 employees of Institute of Nuclear Medicine and Allied sciences (INMAS), Delhi. Data was collected in structured questionnaire (Both functional and non functional) developed based on Kano model. Frequency analysis was done to identify Kano category of service attribute and customer satisfaction coefficient was calculated to identify hygiene or motivating factors. We concluded that it is possible to identify key determinants of quality perception using Kano model in a healthcare service unit. Also, it was concluded that service quality attributes could be categorises not only in hygiene and motivating factors but some of them are both hygiene and motivating

Keywords: Healthcare, Kano model, Patient satisfaction, Service quality.

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Paper Title: A Survey Report of Initial Value Problem with Boundary Value Problems

Abstract: In mathematics, an initial value problem is an ordinary differential equation together with a specified value, called the initial condition, of the unknown function at a given point in the domain of the solution. In physics or other sciences, modeling a system frequently amounts to solving an initial value problem; in this context, the differential equation is an evolution equation specifying how, given initial conditions, the system will evolve with time. But In this paper specifies that various boundary conditions and boundary value problem with initial value problem.

Keywords: Boundary Condition.

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3.	**Authors:**	**L. Devi Priya, S. Karthik**
	Paper Title:	**Secure Captcha Input Based Spam Prevention**

Abstract: Spam is one of the principal stumbling blocks of Internet, which consistently emerge as redundant or unsolicited messages in various communication areas. For example in VoIP, spam appears as unnecessary calls generated by the computers and other auto call generating BOTs. In WEB servers like Gmail, FTP servers like Rapid Share spam appears as fake accounts creation and it sometimes lead to jam of server process due to the BOTs. We have anticipated a resolution to thwart the spam using SECURE CAPTCHA INPUT (SCI) system. CAPTCHA (Completely Automated Public Turing Test to Tell Computers and Human Apart) method aims to determine whether the call is coming from a human or a machine. A CAPTCHA is a type of challenge-response test used in computing to ensure that the response is not generated by a computer. The process usually involves one computer (a server) asking a user to complete a simple test which the computer is able to generate and grade. Because other computers are unable to solve the CAPTCHA, any user entering a correct solution is presumed to be human. Thus, it is sometimes described as a reverse Turing test, because it is administered by a machine and targeted to a human, in contrast to the standard Turing test that is typically administered by a human and targeted to a machine. CAPTCHA that is deployed here is a 3D model developed with action script that can overcome RT-MITM attack which is another milestone in the CAPTCHA security.

Keywords: CAPTCHA, SPAM, RT-MITM attack.

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4.	**Authors:**	**Muhammad Nawaz Tunio, Nazia Rasheed Arain, Shazia Parveen Tunio**
	Paper Title:	**Assessment of Computer Literacy at Secondary Education Level in Rural Areas of Sindh (Pakistan)**

Abstract: Efforts have been taken to some extent in public sector schools but no constant attention and continuous interest is paid to fill the digital gape. Education and ICT can be sound and significant if these kept beyond the political priorities in Pakistan. Urban areas of t Pakistan are well equipped with sound facilities and education of recognized quality but rural areas suffer from this experience. Expansion of private sector in education system has elevated the use of ICT accordingly and middle and upper class families prefer to get services from private schools for quality education of the children. This research recommends that ICT practice should be uniform in all units of Pakistan. ICT application should not be left on the sympathy of conditions as this system needs strong leadership.

Keywords: ICT, Secondary Education, learning, Training.

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	Authors:	**Reshma Banu M, Sowghandhi, Pulidindi Venugopal**
	Paper Title:	**A Study on Charanka Solar Park and Kudankulam Nuclear Power Plant in India**

5.

Abstract: Electricity generation is the process of generating electric power from different sources of energy. Nowadays electricity is very important to run each and every appliance. So, it is a big task how to generate electricity with cheaper cost to fulfill the electricity demand of the consumers. The dependence on fossil fuels, the need for reducing the carbon emissions associated with energy use and the prospects of developing a new and innovative technology sector, make solar energy increasingly attractive, However higher cost per unit of electricity is the major drawback that have held back this energy source. In India, Nuclear power holds the fourth position among the different resources of electricity, presently there are 19 nuclear power plants in India which generates 4,560 MW (2.9% of total installed base) and 4 such power plants are in the pipeline and would be generating around 2,720 MW. India's contribution in fusion development is done through its involvement in the ITER project. This paper examines the comparative study on solar and nuclear power plant in India.

Keywords: Electricity generation is the process of generating electric power**.**

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6.

Authors:	**Rutuja K. Pensionwar, Anil Kumar Mishra, Latika Singh**
Paper Title:	**Quality Metrics in Ubiquitous Computing**

Abstract: Ubiquitous computing is the latest technology that not just make computer as a tool, but helpful and calm device which is one of the main part of human being in his day to day life. The purpose behind this paper is that to share some valuable quality metrics that help us in our near future that help us to improve the quality of our project. In Software engineering Software quality metrics is one of the research areas. In this paper we will see some quality metrics that one can use in ubiquitous projects. As we know that ubicomp is one of the different techniques with some different methods, design guidelines so we can say that there may be different quality metrics for the same. As well as we will see what is meant by ubiquitous, ubiquitous computing and also some new devices in them.

Keywords: Quality, Software Metrics, Quality Metrics, ubiquitous computing, ubiquitous.

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7.

Authors:	**Narendra Kumar Agarwal, Vishal Shrivastava**
Paper Title:	**Simulation Results and Performance Evaluation of Routing Protocols in Mobile Ad-Hoc Networks**

Abstract: One of the majority vital issues in mobile ad hoc network(MANET) is collecting and processing data apparent from the atmosphere and sending that data to be processed and evaluated. Routing in MANETs is a challenging task due to the unpredictable changes in the network topology. MANETs are a heterogeneous mix of different wireless and mobile devices , ranging from little hand- held devices to laptops that are dynamically and arbitrarily located in such a manner that the interconnections between nodes are capable of changing on a continual basis. The major goal of the proposed paper is to analyze the behavior of the both reactive Ad hoc On- demand Distance Vector protocol (AODV) and proactive Destination Sequenced Distance Vector (DSDV) in high mobility scenario under dense and sparse medium. Unlike military applications, most of the other applications of MANETs require moderate to high mobility. That's why it becomes important to analyze the behavior of high mobility. Simulation is done using ns2 in different scenarios in MANET.

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Keywords: MANET, Routing protocol, AODV, DSDV, NS2.

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8.

Authors: **Ashwini Singh, Ajeet Kumar, Pankaj Kumar, M. A. Mujeeb**

Paper Title: **Body Sensor Network: Monitoring and Analysing Real Time Body Parameters in Medical Perspect**

Abstract: As because of modern emerging technologies, low power integrated circuits and wireless communication has enabled a new generation of sensors network. The incorporation of these sensors networks in Health care is very popular and plays a vital role in breath breaking situations. The deployment of monitoring and analysing hardware incorporated with various wireless standards plays a key role in regard to monitors body parameters and collects the data for analysing related issues. The goal of our paper is to develop a wireless system that provides the heartbeat rate, body temperature and body acceleration with real time data which helps to control situation of emergency and all these information will send to the caregivers by various wireless techniques.

Keywords: Wireless Body area Sensors network, Zigbee, Activity Monitors, WSN.

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9.

Authors: **Kashyap Patel, R. K. Prasad**

Paper Title: **Speech Recognition and Verification Using MFCC & VQ**

Abstract: Speech recognition is very important branch in digital signal processing. Speaker Recognition software using MFCC (Mel Frequency Cepstral Co-efficient) and vector quantization has been designed, developed and tested satisfactorily for male and female voice. In this paper the ability of HPS (Harmonic Product Spectrum) algorithm and MFCC for gender and speaker recognition is explored. HPS algorithm can be used to find the pitch of the speaker which can be used to determine gender of the speaker. In this algorithm the speech signals for male and female ware recorded in .wav(dot wav) file at 8 KHz sampling rate and then modified. This modified wav file for speech signal was processed using MATLAB software for computing and plotting the autocorrelation of speech signal. The software reliably computes the pitch of male and female voice. The MFCC algorithm is used to simulate feature extraction module. Using this algorithm the cepstral co-efficient are calculated of Mel frequency scale. VQ (Vector Quantization) method will be used for reduction of amount of data to decrease computation time. In the feature matching stage Euclidean distance is applied as similarity criterion. Because of high accuracy of used algorithm the accuracy of voice command system is high. In this paper the quality and testing of speaker recognition and gender recognition system is completed and analysed.

Keywords: Autocorrelation, Signal, Voice command, Pitch, MFCC, Vector quantization, Euclidean distance.

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Authors: **Kashyap Patel, R. K. Prasad**

10.	**Paper Title:**	**Speech Recognition and Verification Using MFCC & VQ**	
	Abstract: Speech recognition is very important branch in digital signal processing. Speaker Recognition software using MFCC (Mel Frequency Cepstral Co-efficient) and vector quantization has been designed, developed and tested satisfactorily for male and female voice. In this paper the ability of HPS (Harmonic Product Spectrum) algorithm and MFCC for gender and speaker recognition is explored. HPS algorithm can be used to find the pitch of the speaker which can be used to determine gender of the speaker. In this algorithm the speech signals for male and female ware recorded in .wav(dot wav) file at 8 KHz sampling rate and then modified. This modified wav file for speech signal was processed using MATLAB software for computing and plotting the autocorrelation of speech signal. The software reliably computes the pitch of male and female voice. The MFCC algorithm is used to simulate feature extraction module. Using this algorithm the cepstral co-efficient are calculated of Mel frequency scale. VQ (Vector Quantization) method will be used for reduction of amount of data to decrease computation time. In the feature matching stage Euclidean distance is applied as similarity criterion. Because of high accuracy of used algorithm the accuracy of voice command system is high. In this paper the quality and testing of speaker recognition and gender recognition system is completed and analysed.	**33-37**
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11.	**Authors:**	**Selvaradjou, K. Bharathi Manjula**	
	Paper Title:	**Redundant Transmission of Sensed data in Wireless Sensors and Actor Networks for Improved Reliability**	
	Abstract: In Wireless Sensor and Actor Network (WSAN), sensors and actors are linked through wireless channel. Sensor nodes are those which sense data and forward them to actors, which in turn process the data and perform a suitable action on the environment. An actor is a node that also acts as a data sink in the WSANs. The actor node, which can be a mobile, or a static node, may take actions on the environment either individually or collaboratively with other such nodes that may be present in the network. It is important that the sensed events are reported to the sink nodes with high reliability and in a timely manner in order to effect a real-time response behavior of the network. We consider a network in which sensors deliver the sensed events in the form of messages and data in a multi-hop manner. While forwarding data there is a possibility of data loss due to various reasons such as collision, noise interference, and congestion in the network. In such cases, the messages need to be re-transmitted to ensure reliability. Such re-transmissions would waste bandwidth and scarce energy of the sensor nodes and will lead to a shorter lifetime of the network. We propose redundant data transmission schemes in which, the messages are retransmitted by embedding the neighbor node's message as backup data along with the original message. So data even when lost, reaches the destination via neighbour nodes' messages. We evaluated the performance of the protocol using TOSSIM simulator and the embedding of data packets helps improving the lifetime of the network.	**38-41**
	Keywords: Medium Access, Reliability, Sensor Networks, Wireless.		
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	Authors:	**Gaurav Raghav, B. S. Kadam, Manjeet Kumar**	
	Paper Title:	**Optimization of Material Removal Rate in Electric Discharge Machining Using Mild Steel**	
	Abstract: This paper aims at achieving the integrated approach to solve the optimization problem of EDM process. At any stage, the dominance factor of the input variables and output variables contained in the constraints and objective functions can be computed. This technique helps in getting the reliable multi-objective decisions under constrained penalties for the constrained optimization of such processes. In the present work, relationships have been developed between the input decision variables and the desired goals by applying the statistical regression analysis of		

12.	investigations obtained by Electro Discharge machining process for a considerable variation in the crisp sets of variables. The objectives functions were maximized or minimized by using the generalized Genetic Algorithms and the data are stored for a given set of objectives. The results are interpreted with respect to those obtained by using the bi-criterion approach. It is concluded that the results obtained by bi-criterion approach are approximately of the same order of accuracy as calculated experimentally but the computational simplicity of this method makes this methodology favorable to use to solve such mechanical engineering complex problems. **Keywords:** EDM, Material removal Rate, Mild Steel, Optimization. **References:** 1. Book title:- "Engineering optimization: methods and applications."By: A. Ravindran, K. M. Ragsdell, G.V. Reklaitis 2. A charnes and W. W. Cooper, "Goal programming and multiple objective programming." Pp. 39-54, 1977. 3. Joopelli, V., "Multi-Objective Optimization of Parameter Combinations in Electrical Discharge Machining with Orbital Motion of Tool Electrode," Journal of Processing of Advanced Materials, Vol. 4, pp. 1-12, 1994. 4. Jain, V. K., "Multi-Objective Optimization of Electro discharge Machining Process," Microtechnic journal issue, Vol. 2, pp. 33-37, 1990. 5. Kahng, C. H., "Surface Characteristic Behavior Due to Rough and Fine Cutting by EDM," Annuals of the CIRP, Vol. 26/1, pp. 77 -82, 1977. 6. Kee, P., "Development of Constrained Optimization Analyses and Strategies for Multi-Pass Rough Turning Operations," Int. J. Mach. Tools Manuf., pp. 115–127, 1996. 7. L.C. Lim, H.H. Lu," Better Understanding of the Surface Features of Electro-discharge", Journal of Materials Processing Technology, Vol. 24, pp.513-523, 1990. 8. Madhu, P., Jain, V. K., "Finite Element Analysis of EDM Process," Journal of processing of Advanced Materials, Vol. 2, pp. 161-173, 1991. 9. Masatoshi, S., and Ryo, Kubota, "Fuzzy Programming for Multi-objective Job Shop Scheduling with Fuzzy Processing Time and Fuzzy Due date through Genetic Algorithms," Europian Journal of Operation research, Volume 120, pp. 393–407, 2005. 10. Pandit, S. M., "Analysis of Electro-Discharge Machining of Cemented Carbides," Annuals of the CIRP, Vol. 30/1, pp. 111-116, 1981. 11. Spedding, T.A. and Wang, Z.Q. "Study on Modelling of Wire EDM Process" International Journal of Materials Processing Technology Vol 69, No 1-3,18-28, 1997. 12. Spedding, T.A., "Parametric Optimization and Surface Characterization of the Wire EDM Process" Journal of Precision Engineering, American Society of Precision Engineering, , Vol 20, No 1, 5-15, 1997. 13. Smyers, S., Guha, A., "Electrodischarge Machining of Beryllium Copper Alloys Safely and Efficiently," Proceedings of the International Symposium on Electro -Machining, ISEM-11, pp. 217-224, 1995. 14. Wang, W.M., "Advances in EDM Monitoring and Control Systems Using Modern Control Concepts," International Journal of Electro machining, No.2, pp. 1-7, January 1997. 15. Zhang, B., "Effect of Dielectric Fluid Characteristics on EDM Performance," a report from GE Research and Development, December 1997. 16. Steve Krar," Electric Discharge Machining: cutting metal to precise Shapes using electricity." 1994.	**42-49**
13.	**Authors:** **Neenu Prasad** **Paper Title:** **A Comparative Dimensionality Reduction Approach For Face Recognitionunder Uncontrolled Illumination Variations** **Abstract:** Most of the method developed for face recognition with face images collected under relatively well controlled conditions have difficulty in dealing with the range of appearance variations that commonly occur in unconstrained natural images due to different factors. A simple, efficient image processing chain is used whose practical recognition performance is comparable to or better than current methods, a rich descriptor for local texture called Local Binary Pattern(LBP), is used for feature extraction, dimensionality reduction is performed using Principal Component Analysis(PCA) and Linear Discriminant Analysis (LDA). To demonstrate the effectiveness of the proposed method, we give results on the Extended Yale-B dataset which contains images of 38 subjects under 64 illumination and 9 poses. **Keywords:** Face recognition, Feature extraction, illumination normalization, linear discriminant analysis, local binary patterns, principal component analysis. **References:** 1. X. Tan and B. Triggs, "Enhanced local texture feature sets for face recognition under difficult lighting conditions," in Proc. AMFG, 2007, pp. 168–182.W.-K. Chen, Linear Networks and Systems (Book style). Belmont, CA: Wadsworth, 1993, pp. 123–135. 2. J. Yang, A. F. Frangi, J.-Y. Yang, D.Zhang, and Z. Jin, "KPCA plus LDA: A complete kernel fisher discriminant framework for feature extraction and recognition," IEEE Trans. Pattern Anal. Mach. Intell., vol. 27, no. 2, pp. 230– 244, Feb. 2005. 3. R. Javier, V. Rodrigo, and C. Mauricio, "Recognition of faces in unconstrained Environments: A comparative study," in EURASIP J. Adv.Signal Process., 2009, vol. 2009, pp. 1–19.. 4. X. Tan and B. Triggs, "Fusing Gabor and LBP feature sets for kernel based face recognition," in Proc. AMFG, 2007, pp. 235–249. 5. N. Dalal and B. Triggs, "Histograms of oriented gradients for human detection," in Proc. CVPR, Washington, DC, 2005, pp. 886–893. 6. Y. Pang, Y. Yuan, and X. Li, "Gabor-based region covariance matrices for face recognition," IEEE Trans. Circuits Syst. Video Technol., vol.18, no. 7, pp. 989–993, Jul. 2008. 7. H. Chen, P. Belhumeur, and D. Jacobs, "In search of illumination invariants,"in Proc. CVPR, 2000, pp. 254–261. 8. K. Lee, J. Ho and D. Kriegman,"Acquiring linear subspaces for face recognition under variable lighting,". 9. M. Turk and A. Pentland, "Eigenfaces for recognition," J. Cognitive Neursci., vol. 3, no. 1, pp. 71–86, 1991. 10. L.Sirovich and M. Kirby, "Low dimensional procedure for the characterization of human faces," J. Opt. Soc. Amer., vol. 4, no. 3, pp.519–524, 1987.	**50-53**
	Authors: **Hansaraj S. Wankhede, S. A. Chhabria, R. V. Dharaskar** **Paper Title:** **Human Computer Interaction Using Eye and Speech: The Hybrid Approach** **Abstract:** The physically impaired users cannot handle the traditional input devices such as keyboard, mouse etc. the alternate for this category of users must be available. Speech is another promising technology to achieve this goal. The first approach researches estimation of eye gaze point as pointing device. The second approach researches speech recognition as an input and the third approach deals with the hybrid approach for the combination of both. The aim of ongoing research is to develop an application to replace a computer mouse for a people with physical	

impairment. The application is based on an eye gaze estimation algorithm and assumes that the camera and the head position are fixed. The system after successful development will able to interact user with specific application.

Keywords: Eye Gaze Point, Disable users, Speech Recognition, Hybrid approach etc.

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Authors:	**A. D. Pathak, S. J. Karale**
Paper Title:	**Partially Improved Subsequence Discovery Algorithm for Sequence Matching**

Abstract: This article describes an Improved technique for the sub sequence discovery algorithm used for natural language processing in question answering system for matching user text input in natural language processing against an existing knowledge base, consisting of semantically described words or phrases. Most common methods & techniques of natural language processing are overviewed and their main problems are outlined. A sequence matching with subsequence analysis algorithm is analyzed and improvements are done which deals with the problems of exact matching,change in custom spelling errors as well as the improvement in the performance metric of the similarity matching.Popular approaches that solve this problem include stemming, lemmatization and various distance functions,sequence matching techniques are analysed to get the better possible technique for solving the problems with higher accuracy. Then the major components of the similarity measure are defined and the computation of concurrence and dispersion measure is presented. Results of the algorithms performance on a test set are then analysed.

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

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Authors: **Vaibhav V. Deshpande, A. R. Bhagat Patil**

Paper Title: **Energy Distributed Clustering for Improving Lifetime of Wireless Sensor Network**

Abstract: Clustering is an efficient way to improve lifetime of wireless sensor network. To enhance lifetime of sensor network this paper proposes to have multiple cluster heads within the cluster of sensor nodes. At a given time one cluster head (CH) from the cluster acts as a leader of the cluster and the leadership is rotated among the cluster heads based on the energy levels. The experimental results show the efficiency of proposed algorithm in terms of residual energy, total alive nodes and the execution time as compared to the cluster with single cluster head and LEACH protocol.

Keywords: Clustering, Cluster heads, Lifetime, Wireless Sensor Network.

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Authors: **Radhika P. Fuke, M. V. Sarode**

Paper Title: **Foreground Extraction in the Compressed Imaging Domain Using Saliency Detection Technique**

Abstract: Salient region detection in images is very useful for image processing applications like image segmentation, object detection and recognition. In this paper, an improved approach to detect salient region is presented Using saliency detection technique. Existing saliency detection models are built in the uncompressed domain. Since most images over Internet are typically stored in the compressed domain such as joint photographic experts group,a novel saliency detection model in the compressed domain in this paper. The intensity, color, and texture features of the image are extracted. Detection of irregular visual patterns in images and in video sequences is useful for a variety of tasks. Detecting suspicious behaviors or unusual objects is important for surveillance and monitoring. Identifying spatial saliency in images is useful for quality control and automatic inspection.

Keywords: Compressed domain, image retargeting, joint photographic experts group, saliency detection, denoising.

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Authors: **Nishand K, Ramasami S, T. Rajendran**

Paper Title: **An Efficient way of Record Linkage System and Deduplication using Indexing Techniques, Classification and FEBRL Framework**

Abstract: Record linkage is an important process in data integration, which is used in merging, matching and duplicate removal from several databases that refer to the same entities. Deduplication is the process of removing duplicate records in a single database. In recent years, data cleaning and standardization becomes an important process in data mining task. Due to complexity of today's database, finding matching records in single database is a crucial one. Indexing techniques are used to efficiently implement record linkage and deduplication. In this paper, three indexing techniques namely blocking index, sorting indexing and bigram indexing are used with a modification of existing techniques that reduces the variance in the quality of the blocking results. In addition to the indexing techniques, six comparison techniques and two classifiers are used. There is a potential for large performance speed-ups and better accuracy to be achieved by using indexing techniques along with comparison and classifier techniques.

Keywords: Record linkage, Indexing techniques, data matching, blocking, Febrl framework.

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Authors: **Saket Vihari, Arun Prakash Agrawal**

Paper Title: **A System of Humanizing Test Automation Outlay Efficiency**

Abstract: Software can be tested either manually or automatically. The two approaches are complementary: automated testing can perform a large number of test in little time, whereas manual testing uses the knowledge of the testing engineer to target testing to the part of the system that are assumed to be more error-prone. Auto test is a testing tool that provide a "best of both worlds" strategy :it integrates developers test cases into an automated process of systematic contract –driven testing. Test automation has become more and more popular as the market demand for more complex software, involving higher risks and using the same or fewer resources in development, has increased. A number of research paper discuss the problem faced in the test automation process ,such as the complexity of automation ,poor choice of tools,and the effort spent to automate. This paper proposes a test automation viability analysis method of a test case based on mathematical procedures which intend to increase the chance of finding outlay efficiency test automation process.

Keywords: Test automation, outlay efficiency, Viability, Method.

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Authors: **P. Subbaraj, A. Ramu, N. Raman, J. Dharmaraja**

Paper Title: **Mixed Ligand Complexes Containing (2-Hydroxy- 4 -Methoxyphenyl) (Phenyl) Methanone and 2-Aminophenol: Synthesis and DNA Cleavage**

Abstract: A bidentate NO type Schiff base ligand (HA) has been obtained by the condensation reaction of 2-hydroxy-4-metoxy benzophenone with aniline. Using this Schiff base as main ligand(HA) and 2-aminophenol as co-ligand (B), few novel mixed ligand complexes of composition MAB [M = Mn(II), Co(II), Ni(II), Cu(II) and Zn(II)] have been synthesized. The resulting Schiff base (HA) and the mixed ligand complexes have been structurally characterized by UV-Vis., IR, 1H-NMR, FAB-Mass, EPR, XRD, SEM and magnetic studies. XRD and SEM reveal that all the complexes are microcrystalline nature with uniform morphology. In-vitro biological activities of free Schiff base (HA) and the mixed ligand complexes (1-5) were screened against few pathogenic bacterial and fungal strains by well diffusion technique. All the complexes show moderate potent activities than Schiff base ligand.

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Furthermore, the oxidative DNA cleavage activities of free Schiff base and the mixed ligand complexes have been done by agarose gel electrophoresis method in peroxide medium.

Keywords: Mixed ligand complexes, Powder XRD, SEM, Biological, DNA activity.

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21.

Authors: **Jayalakshmi N, Sagar B. M**

Paper Title: **Virtual Machine Scheduling for Architectural Shared Resources in Open Stack Based Cloud**

Abstract: In IAAS cloud virtual machine (VM) migration between socket and nodes has been used to avoid conflicts among VM on system resources such as CPU and memory. Micro-architectural resources such as caches, memory controllers and non-uniform memory access (NUMA) affinity, have relied on intra socket scheduling to reduce cache contention. This paper proposes algorithm for cluster-level virtual machine scheduling based on cache sharing on same socket and these are considered in dynamic environment which do not require any prior knowledge on nature of VMs.The paper would present algorithm for the scheduler into a real cloud system (Open Stack), and the performance of the scheduler will then be investigated on various scientific and commercial workloads.

Keywords: IAAS architecture, NUMA, OpenStack, CPU bound, memory bound.

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22.

Authors: **Sunil Kumar C. A**

Paper Title: **Local Maximum Lifetime Algorithms for Strong Barrier Using Coordinated Sensors**

Abstract: Barrier coverage is known to be an appropriate model of coverage for movement detection and boundary guard, which is achieved by barriers of coordinated sensors. A Border Security System watches intruders by using sensor nodes with communication function. The detection of some intruders and the use of a long-term operation system are required in this system. This paper proposes network construction methods of sensor nodes for Border Security Systems that uses a Divide-and-Conquer scheme. The design is based on new local maximal lifetime algorithm and following protocol for strong k- barrier with coordinated sensors. The proposed barrier coverage network construction methods are suitable for Border Security Systems and reduce the power consumption of the whole network system by effective control of sensor nodes.

Keywords: Wireless sensor network, barrier coverage, local algorithm, data fusion.

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23.

Authors: **Arvind Jaiswal, Gaurav Dubey**

Paper Title: **Identifying Best Association Rules and their Optimization Using Genetic Algorithm**

Abstract: Data mining is the analysis step of the "Knowledge Discovery in Databases", It is the process that results in the detection of new patterns in large data sets. The main aim of data mining is to pull out knowledge from an existing dataset and transform it into a flexible structure. In data mining association rule is a popular and easy method to find frequent itemsets from large datasets. In general frequent itemsets are generated from large data sets by applying association rule mining take too much computer time to compute all the frequent itemsets. By using Genetic Algorithm (GA) we can improve the results of association rule mining. Our main purpose is by Genetic Algorithm to generate high quality Association Rules, by which we can get four data qualities like accuracy, comprehensibility, interestingness and completeness. Genetic Algorithms are powerful and widely applicable stochastic search and optimization methods based on the concepts of natural selection and natural evaluation. The advantage of using genetic algorithm is to discover high level prediction rules is that they perform a global search and cope better with attribute interaction than the greedy rule induction algorithm often used in data mining. The main aim of this paper is to find all the frequent itemsets from given data sets using genetic algorithm. In this paper we are using the large dataset and our Experimental results on this dataset show the effectiveness of our approach. This paper provides the major improvement in the approaches for association rule mining using genetic algorithms.

Keywords: Genetic Algorithm (GA), Association Rule, Frequent itemset, Support, Confidence, Data Mining.

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24.

Authors:	**Divakar Singh, Bal Krishan**
Paper Title:	**Optimization of Organic Light Emitting Devices**

Abstract: A program in MATLAB has been developed for calculating various parameters e.g., Efficient use of excitation energy by proper use of dopants (by studying exciton density profile as a function of time), locating correct position of emission zone (location of charge accumulation layer) and thus enabling maximum recombination in single layer and multilayer devices. The extracted features of organic material are used as input vectors for the standard equations, results in increasing the efficiency of OLED. The test results helps in the analysis of identify the fault and help us to use the device more accurately and has a better emission rate compared to the previous time analysis.

Keywords: OLED, Exciton, Optimization, Organic Material, MATLAB, Device Simulation, Electronic and Optical Model.

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25.

Authors:	**Minu Rani, Rekha Yadav, Suman Sehrawat**
Paper Title:	**Study of Clustering and Neighbor Detection Protocol in MANET for Energy Efficiency**

Abstract: Now a days for quick communication various of the communication protocol is being used. Out of them MANET mobile ad-hoc network is widely attracting all the research. Various protocol is being used for the detection methods and reducing the battery life. In this paper we are introducing a complete study and comparison of the modern MANET technology and clustering in case of mobile ad-hoc network. The analyzed result for the algorithm is given for the detection of neighbor detection algorithm. The studied result to insuring reduced energy consumption is by using color Petri net (CPN) tool. To calculate the weight node is also done to ensure research fruitful.

Keywords: MANET, NDP, Clustering in MANET, CWP.

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26.

Authors: **P. M. Chavan, Manan C. Jadhav, Jinal B. Mashruwala, Aditi K. Nehete, Pooja A. Panjari**

Paper Title: **Real Time Emotion Recognition through Facial Expressions for Desktop Devices**

Abstract: Thepaper states the technique of recognizing emotion using facial expressions is a central element in human interactions. By creating machines that can detect and understand emotion, we can enhance the human computer interaction. In this paper, we discuss a framework for the classification of emotional states, based on still images of the face and the implementation details of a real-time facial feature extraction and emotion recognition application are discussed. The application automatically detects frontal faces from the captured image and codes them with respect to 7 dimensions in real time: neutral, anger, disgust, fear, joy, sadness, surprise. Most interestingly the outputs of the classifier change smoothly as a function of time, providing a possibly worth representation of code facial expression dynamics in a fully automatic and unnoticeable manner. The main objective of the paper is the real-time implementation of a facial emotion recognition system. The system has been deployed on a Microsoft's Windows desktop.

Keywords: Real time, facial expression, emotion recognition.

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4. Irfan A. Essa,Coding, Analysis, Interpretation, and Recognition of Facial Expressions.

27.

Authors: **K. P. Shaji, I.Alsheba, Y. A. Syed Khadar, S. Kannan**

Paper Title: **Multiparameter Monitoring and Fault Indication Using Inductive Power Transfer System**

Abstract: The paper aims at demonstrating communication capabilities of IPT. For this data communication is performed between two modules using the concept of IPT. IPT was deemed to be the best solution to the system houses a multi parameter acquisition module such as temperature, speed, voltage, current and data transfer from the motor. The receiver side is another microcontroller coupled to an inductive coil that gets the data and displays in the LCD. A brief background to IPT (Inductive Power Transfer) technology and its applications is given and the design criteria for the paper are defined in detail. To be accurate, IPT data communication helps to reduce unnecessary wire connections and data is transmitted without any touch. Further the paper can be enhanced by looking for fault analysis inside the motor. This can be done by analyzing various parameters of the motor. A novel two-way IPT communication system was designed, which worked on the concept of pulsing the system on and off to send data serially. The paper involves transmission of data through inductive flux without any contact between the two modules. Further as no frequency tunings or any calibration is required between different modules a single system can be used with multiple clients. This reduces a lot of hazards such as interference with other modules and RF transmitters in the vicinity.

Keywords: Switching, LCD, LED, Port.

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