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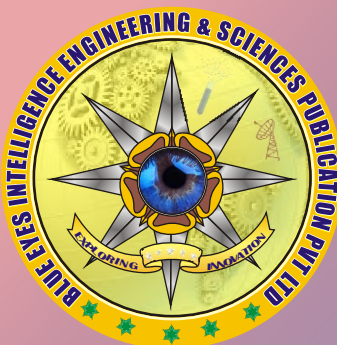
**ISSN : 2249 - 8958**

**Website: [www.ijeat.org](http://www.ijeat.org)**

**Volume-4 Issue-3, February 2015**

**Published by:**

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S. No	<b>Volume-4 Issue-3, February 2015, ISSN: 2249-8958 (Online)</b> <b>Published By: Blue Eyes Intelligence Engineering &amp; Sciences Publication Pvt. Ltd.</b>		Page No.
1.	<b>Authors:</b>	<b>Abhilash Patil</b>	<b>1-4</b>
<b>Paper Title:</b>	<b>Heat of Hydration in the Placement of Mass Concrete</b>		
<p><b>Abstract:</b> The factor distinguishing between normal concrete and mass concrete is the thermal characteristics. Mass concrete is defined as “any volume of concrete with dimensions large enough to require that measures be taken to cope with generation of heat from hydration of the cement and attendant volume change to minimize cracking.” Use of mass concrete has been in existence over the last two centuries, and it has lately been reaching its full potential in the construction industry. The proper design and construction of mass concrete placements is essential to ensure the durability and serviceability of the structure. Mass concrete is required in massive structures containing beams, columns, piers, dams where its volume is of such a magnitude as to require special means for coping with the generation of heat and which is followed by volume change. This paper explains the factors influencing generation of heat of hydration (cracking) along with the different ways to lower the heat of hydration and then the methods to be implemented for its reduction.</p> <p><b>Keywords:</b> Air entrainment; cracking; heat of hydration; restraint.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. A case study of mass concrete construction for “Midwest Boarder Bridges” by ‘Jacob Joseph Shaw’ of ‘Iowa State University’ (2012)</li> <li>2. ‘P.K. Mehta and P.J.M. Monteiro’,” Concrete: Microstructure, Properties, and Materials”.</li> <li>3. “Historic Concrete in Scotland-Part I” by ‘Denis Urquhart’. Published by Historic Scotland, March 2013. Historic Scotland, Longmore House, Salisbury Place, Edinburgh, EH9 1SH.</li> <li>4. “Mass Concrete” by ‘Robert Moser’ CEE8813A – Material Science of Concrete.</li> <li>5. “Mass Concrete – How do you handle the heat” by ‘John Gajda’, PE, CTL Group.</li> <li>6. “Mass and Thermally Controlled Concrete” by ‘ACI Committee 207’.</li> <li>7. “Mass Concrete” reported by ‘ACI committee 207’.</li> <li>8. “Massive Concrete Placements” presented by Abdulkader Kairouz(20 December 2011)</li> <li>9. “ADVANCED CONCRETE TECHNOLOGY 3- PROCESSES” BY ‘JOHN NEWMAN’, ‘B S CHOO’.</li> </ol>			
2.	<b>Authors:</b>	<b>Yogita L. Kumbhare, Pankaj H. Rangaree</b>	<b>5-7</b>
<b>Paper Title:</b>	<b>Patient Health Monitoring Using Wireless Body Area Sensor Network</b>		
<p><b>Abstract:</b> Wireless Body Area Sensor Network is one of the main application areas for ubiquitous computing. The potential for ubiquitous computing is evident in almost every aspect of our lives including the hospital, mergency and critical situations. The Wireless Body Area Sensor networks (WBASNs) is a wireless networks have enabled the design of low-cost, intelligent, tiny, and lightweight medical sensor nodes that can be placed on human body to monitor various physiological vital signs of patient for a long period of time and providing real-time feedback to the user and medical staff. In this paper, Developing a hardware which will sense heart rate, blood pressure, temperature of a person, and respiration of the person using gsm modem all information lively transmitted to gsm mobile. The attached sensors on patient’s body and they are able to sense the various heath parameters of patient such as heart rate, blood pressure, temperature, and respiration contains. These health parameters are then communicated to physician’s server. The physician holds various threshold values of the health parameters for each and every patient. This system can detect the abnormal conditions, issue an alarm to the patient and send a SMS to the physician.</p> <p><b>Keywords:</b> Wireless body area sensor network, GSM modem, Microcontroller, heartbeat sensor, pressure, temperature, respiration sensors.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Christos C. Bellas, Athanasios Papadopoulos, Roberto Rosso” Identification of COPD Patients’ Health Status Using o” Intelligent System in the CHRONIOUS Wearable Platform” IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS, VOL. 18, NO. 3, MAY 2014</li> <li>2. Lei Clifton, David A. Clifton, Marco A. F. Pimentel “Predictive Monitoring of Mobile Patients by Combining Clinical Observations With Data From Wearable Sensors” IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS, VOL. 18, NO. 3, MAY 2014</li> <li>3. Ambika R, Kiran Jose, Priyadharshini. K, Priyanga S Kumar “ Wireless Remote Healthcare System” INTERNATIONAL JOURNAL OF SCIENTIFIC &amp; TECHNOLOGY RESEARCH VOLUME 2, ISSUE 10, OCTOBER 2013</li> <li>4. Diogo Gomes, Carlos Gonçalves, José A. Afonso “Performance Evaluation of ZigBee Protocol for High Data Rate Body Sensor Networks” World Congress on Engineering 2013 Vol II, WCE 2013, July 3 - 5, 2013, London, U.K.</li> <li>5. Karandeep Malhi, Subhas Chandra Mukhopadhyay” A Zigbee-Based Wearable Physiological Parameters Monitoring System” IEEE SENSORS JOURNAL, VOL. 12, NO. 3, MARCH 2012</li> <li>6. Honggang Wang, Hua Fang, Liudong Xing, Min Chen,( 2011) ” An Integrated Biometric-based Security Framework Using Wavelet-Domain HMM in Wireless Body Area Networks (WBAN)” IEEE Communications Society subject matter experts for publication in the IEEE ICC proceedings.</li> <li>7. Raju Singh(March 2011) “Confidentiality &amp; Authentication Mechanism for Biometric Information Transmitted over Low Bandwidth &amp; Unreliable channel” School of Computer Engineering and IT, Shobhit University, Meerut, India Vol.3, No.2,</li> <li>8. Mikael Soini, Jussi Nummela, Petri Oksa, Leena Ukkonen and Lauri Sydänheimo (2009).” Wireless Body Area Network for Hip rehabilitation” Tampere University of Technology, Department of Electronics, Rauma Research Unit pp. 202-206 .</li> <li>9. Cory Cornelius(August 2010) “On Usable Authentication for Wireless Body Area Networks” Department of Computer Science Dartmouth College, Presented at HealthSec, .</li> <li>10. Jamil Y. Khan, Mehmet R. Yuce, and Farbood Karami “Performance Evaluation of a Wireless Body Area Sensor Network for Remote Patient Monitoring”</li> <li>11. A. Soomro, D. Cavalcanti, IEEE (Feb 2007)“Opportunities &amp; Challenges using WPAN and WLAN Technologies in Medical Environments”, Communications Magazine, vol:45, no:2, page 114-122.</li> <li>12. Adnan Saeed, Miad Faezipour IEEE 2009,“Plug and Play Sensor Node for Body Area Network”.</li> <li>13. Jamil Y. Khan,school of computer science,Australia,IEEE (09,07, 2009,) ”Wireless Body Area Network for Medical Applications”.</li> </ol>			

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<b>Paper Title:</b>	<b>Design Optimization of a 3 DOF Translational Parallel Manipulator</b>
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	<p><b>Abstract:</b> This paper presents an optimal kinematic design of a 3PRC (prismatic-revolute-cylindrical) spatial translational parallel manipulator with inclined actuator arrangement by formulating a multi-objective optimization problem. Three performance criteria’s namely Global Conditioning Index (GCI), Global stiffness Index (GSI) and Workspace volume are considered as the objective functions. A multi-objective evolutionary algorithm based on the control elitist non-dominated sorting genetic algorithm (CENSGA) is adopted to find the final approximation set.</p>	
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	<p><b>Keywords:</b> GCI, GSI, multi-objective genetic algorithm, Pareto front, GA, CENSGA</p>	
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<b>Paper Title:</b>	<b>Evaluating Prediction Factor Prominence in Academic Domain Selection using Dominance Analysis – Ministry of Higher Education (MoHE), Ibri CAS, Sultanate of Oman</b>
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	<p><b>Abstract:</b> This paper, advocates on a broader use of relative prominence keys as an appendage to multiple regression analysis. The goal of such analysis is to screen the variance among multiple predictors to realize the role played by each predictor in a regression equation. Dominance Analysis is a method to evaluate the relative prominence of the prognosticators. Regrettably, when predictors are correlated, they totally trust on metrics which are flawed indicators of variable importance. Furthermore, the key benefits of two relative prominence analyses, dominance analysis and relative weight analysis, over estimates produced by multiple regression analysis. Here, this investigation helps us to evaluate the importance of the prediction factors involved in determining the criteria’s for domain selection of the students. A mockup study was conducted to evaluate the performance of the proposed actions and develop commendations.</p>	
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	<p><b>Keywords:</b> Predictor prominence, weight analysis, Dominance Analysis (DA), Multiple Linear Regression (MLR).</p>	<p><b>18-21</b></p>
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	<p><b>Paper Title:</b> Comparative Study of Different Flexures of MEMS Accelerometers</p>	
	<p><b>Abstract:</b> There is a greater demand for developing a monolithic 3- axis accelerometer. The main challenges for developing a 3-axis accelerometer are- the size factor, realizing z-axis sensing, and decoupling the motions of the structure in three mutually perpendicular directions. With this motivation, we analyze structures using different flexures and evaluate their compliance and natural frequencies in three orthogonal directions. In this paper, the analytical and numerical study of different flexures such as straight-beam flexures, crab-leg flexures, serpentine flexures, and folded flexures is done. First, the concept of lumped parameter is described in brief, then numerical simulation of flexures is done using software ANSYS. Finally, a comparison of the analytical and numerical results is presented.</p> <p><b>Keywords:</b> MEMS Accelerometer, Simulink Model</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Navid Yazdi, Farrokh Ayazi, and Khalil Najafi, "Micromachined Inertial Sensors", proceeding of IEEE, vol. 86, No. 8, August, 1998, pp. 1640-1659.</li> <li>Hidekuni Takao, Hirofumi Fukumoto, and Makoto Ishida, "A CMOS Integrated Three-Axis Accelerometer Fabricated with commercial Submicrometer CMOS Technology and bulk micromachining", IEEE transactions on electron devices, Vol. 48, 2001, pp. 1961-1669.</li> <li>R. Toda, N. Takeda, T. Murakoshi, et al., "Electrostatically levitated spherical 3-axis accelerometer", IEEE, 2002, pp. 710-713.</li> <li>Junseok Chae, Hal and Kulah and Khalil Najafi, "A monolithic three-axis silicon capacitive accelerometer with micro-g resolution", The 12th International Conference on Solid state sensors, Actuators and Microsystem, Boslon, 2003, pp. 81-84.</li> <li>S. Seok, S. Seong, B. Lee, J. Jim, K. Chum, "A high performance mixed micromachined differential resonant accelerometer", proceeding of IEEE, sensors, Vol. 2, 2002, pp. 1058-1063.</li> <li>G. K. Fedder, "Simulation of Microelectromechanical systems", Ph. D. dissertation, EECS, University California, Berkeley, 1994.</li> <li>Suhas Mohite, Nishad Patil and Rudra Pratap, "Design, modeling, and simulation of vibratory micromachined gyroscope", Journal of physics: Conference series 34, 2006, pp. 757-763.</li> <li>Hao Luo, Gang Zang, L. Richard Carley, Fellow, IEEE, and Garry K. Fedder, "A post-CMOS micromachined lateral accelerometer", Journal of microelectromechanical systems, Vol. 11, No.3, June 2002, pp. 188-195.</li> </ol>	22-25
6.	<p><b>Authors:</b> Mahshid Amiri, Mehdi Shamsaie Mehrjan</p>	
	<p><b>Paper Title:</b> Salinity Effect on Growth, Permanence, and Blood Factors of Abramis Brama Orientalis Fry of Caspian Sea in Different Weights</p>	
	<p><b>Abstract:</b> The present study is developed for determination of an appropriate weight of releasing Abramis Brama Orientalis fry of Caspian Sea toward increase in fisheries returning coefficient. Consequently, blood factors including Sodium Ion, Potassium Ion, chlorine Ion, Cortisol Hormone, Blood Protein, growth and permanence indexes of Abramis Brama Orientalis fry are considered in four different weight groups of 320, 470, 730 and 990 mg. in fresh and brackish waters. The test extended up to 14 days in brackish water (9 g/l salinity). The result show that the blood factors in all weight groups have high significant differences in fresh waters (<math>p &lt; 0.01</math>). In the end of the test, the Sodium viscosity of Abramis Brama Orientalis fry blood has no any significant differences in none of the weight groups (<math>p &gt; 0.05</math>); whereas, other blood factors have significant differences to each other (<math>p &lt; 0.01</math>). No any differences were observed within growth index of the weight groups (<math>p &lt; 0.05</math>). Also, holding higher percentage of permanence at the end of the test and considering the quantity of mortalities, the weight group of 990 mg. is selected as the best weight option of Abramis Brama Orientalis due to its physiological readiness for releasing to the Caspian Sea.</p> <p><b>Keywords:</b> Abramis Brama Orientalis, Cortisol Hormone, brackish water, Caspian Sea</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Berg, I.S. (1956). Fresh water fishes of the U.S.S.R and adjacent countrous. (Millennium ed. Vol 11). Translation Jerusalem.</li> <li>Sattari, M., (2003). Ichthyology. hagh shenas publisher.</li> <li>Asgari, R. ( 2005). Ichthyology. Naghshe mehr publisher.</li> <li>Vosoghi, G., Mostajir, B. (2002). Fresh water fishes. Tehran publisher.</li> <li>North, B.P., Trunbull, J.F., Ellis, T., Porter. M.J., Migaud, H., Born, J., &amp; Bromage N.R. (2006). The impact of stocking density on the welfare rainbow trout (<i>Oncorhynchus mykiss</i>). <i>Journal of Aquaculture</i>, 225, 466-479.</li> <li>Wuertz, W.A., &amp; Durborow, R.M. (1992). Interaction of ph, Carbon Dioxide, Alkalinity and Hardness in fish ponds. SARC publication No. 464.</li> <li>Boeck, G., Vlaiminck, A., &amp; Blust, R. (1996). Central monoaminergic responses to salinity and temperature rise in common carp. <i>The journal of experimental</i>, vol 199.</li> <li>Oran, L., Dorucu, M., &amp; Yazlak, A. (2003). Hematological parameters of tree cyprinid fish species from karakaya Dam Lake, Turkey. <i>Journal of Biological Sciences</i>, 3, 320-328.</li> </ol>	26-29



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<b>Authors:</b>	<b>Pardeep Kumar Gupta, Rajeev Kumar</b>
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<b>Paper Title:</b>	<b>Determination of Optimum Maintenance and Rehabilitation Strategies for Urban Semi Dense Bituminous Surface and Premix Carpet Roads</b>
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	<p><b>Abstract:</b> The road traffic has increased manifolds during the post-independence in India. The traffic axle loading may be much heavier than the specified limit in many cases. As a result of which, the existing road network has been subjected to severe deterioration leading to premature failure of the pavements. There is a dire need of developing a meaningful approach towards implementing the maintenance and rehabilitation schemes of the road network. In such a scenario, development of the effective pavement management strategies would furnish useful information to ensure the compatible and cost- effective decisions so as to keep the existing road network intact. The optimum maintenance and rehabilitation strategies applied in this study would be useful in planning pavement maintenance strategies in a scientific manner and ensuring rational utilization of limited maintenance funds. Once this strategy for urban road network is implemented and made operational; this would serve as window to the other urban road network of different regions.</p>	
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	<p><b>Keywords:</b> Introduction, Methodology Used, Application of Methodology, Conclusion &amp; Recommendation</p>	
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<b>Authors:</b>	<b>Rachna Verma, Anjali Potnis</b>
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<b>Paper Title:</b>	<b>Load Current Adaptive Step Size and Perturbation Frequency (LCASF) MPPT Algorithm or Adaptive Step Size with Adaptive Perturbation Frequency Scheme for Grid Connected PV System</b>
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	<p><b>Abstract:</b> This paper deals with the growing electricity demand along with reduction in conventional fuel sources and growing environmental concerns, the renewable energy sources like wind power , solar power, hydro power , geothermal , biomass are globally welcomed to replace the conventional power sources. Among the different methods of generating electric power by alternative resources, photovoltaic (PV) has grown steadily in recent decades as one of the best technology alternative because it is free, abundant, pollution free and most widely distributed. Photovoltaic (PV) grid connected system is the trend of solar energy application. Photovoltaic (PV) is a technique of converting solar radiation into direct current electricity to generate electricity using semiconductor. The</p>	<p><b>45-51</b></p>
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	<p>total amount of energy which is irradiated from the sun to the earth's surface equal's approximately 10,000 times the annual global energy consumption. But a typical solar panel converts only 30 to 40 percent of the incident solar irradiation into electrical energy. Maximum power point tracking technique is used to improve the efficiency of the solar panel. The proposed work is validated by simulating it for different load configurations using Matlab and the simulation result verifies the efficiency of proposed algorithm</p> <p><b>Keywords:</b> power system grid, photovoltaic grid, solar panel, MPPT.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Adaptive Step Size With Adaptive-Perturbation-Frequency Digital MPPT Controller for a Single-Sensor Photovoltaic Solar System Yuncong Jiang, Student Member, IEEE, Jaber A. Abu Qahouq, Senior Member, IEEE, and Tim A. Haskew, Senior Member, IEEE, IEEE TRANSACTIONS ON POWER ELECTRONICS, VOL. 28, NO. 7, JULY 2013</li> <li>Energy comparison of MPPT techniques for PV Systems ROBERTO FARANDA, SONIA LEVA, Department of Energy Politecnico di Milano Piazza Leonardo da Vinci, 32 – 20133 Milano ITALY, WSEAS TRANSACTIONS on POWER SYSTEMS Issue 6, Volume 3, June 2008</li> <li>Predictive &amp; Adaptive MPPT Perturb and Observe Method N. FEMIA, Member, IEEE, D. GRANOZIO, G. PETRONE, G. SPAGNUOLO, Member, IEEE University of Salerno Italy M. VITELLI, Second University of Naples Italy, IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS VOL. 43, NO. 3 JULY 2007</li> <li>Theoretical and Experimental Analyses of Photovoltaic Systems With Voltage- and Current-Based Maximum Power-Point Tracking Mohammad A. S. Masoum, Hooman Dehbonei, and Ewald F. Fuchs, Fellow, IEEE, IEEE TRANSACTIONS ON ENERGY CONVERSION, VOL. 17, NO. 4, DECEMBER 2002.</li> <li>A Novel Maximum Power Point Tracking Technique for Solar Panels Using a SEPIC or Cuk Converter Henry Shu-Hung Chung, Member, IEEE, K. K. Tse, Member, IEEE, S. Y. Ron Hui, Fellow, IEEE, C. M. Mok, and M. T. Ho, Student Member, IEEE, IEEE TRANSACTIONS ON POWER ELECTRONICS, VOL. 18, NO. 3, MAY 2003</li> <li>An Improved Maximum Power Point Tracking for Photovoltaic Grid-Connected Inverter Based on Voltage-Oriented Control Riad Kadri, Jean-Paul Gaubert, Member, IEEE, and Gerard Champenois, Member, IEEE, IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, VOL. 58, NO. 1, JANUARY 2011.</li> <li>Modeling of Maximum Power Point Tracking Controller for Solar Power System Aryunto Soetedjo, Abraham Lomi, Yusuf Ismail Nakhoda, Awan Uji Krismanto Dept. of Electrical Engineering, National Institute of Technology Malang Jalan Raya Karanglo Km 2 Malang, TELKOMNIKA, Vol.10, No.3, July 2012, pp. 419~430</li> <li>Simulation and Hardware Implementation of Incremental Conductance MPPT With Direct Control Method Using Cuk Converter Azadeh Safari and Saad Mekhilef, Member, IEEE, IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, VOL. 58, NO. 4, APRIL 2011.</li> <li>A Variable Step Size INC MPPT Method for PV Systems Fangrui Liu, Shanxu Duan, Fei Liu, Bangyin Liu, and Yong Kang, IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, VOL. 55, NO. 7, JULY 2008.</li> <li>Photovoltaic Maximum Power Point Tracking Employing Load Parameters D. Shmilovitz Tel Aviv University, School of Electrical Engineering, Tel Aviv, Israel, IEEE ISIE 2005, June 20-23, 2005, Dubrovnik, Croatia</li> </ol>	
<b>Authors:</b>	<b>Faris M. Al-Athari, Abdulameer K. Hussain</b>	
<b>Paper Title:</b>	<b>A New Multi- Authentication Scheme using Attribute Aggregation</b>	
9.	<p><b>Abstract:</b> This paper presents an authentication method for ensuring the best user's identity proof. The authentication procedure depends on identifying different user's attributes since no single person or system knows anyone's complete set of identity attributes. Individuals are most likely to know the majority of the attributes that serve to identify them. In this scheme, different attributes are defined to serve two purposes. First, to authenticate each user depending on weights assigned to each attribute of the authenticated users and these are subjected to different statistical measurements. Second, depending on the result of this statistical measurement, the system grants users different privileges using access control mechanism and thus we construct a multi-level authentication. Finally, the system applies a combination of different attributes which differs from other traditional attribute authentication.</p> <p><b>Keywords:</b> Attribute-based systems, Authentication, Privilege, Identity Providers.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Y.Eric, and T.Jin, "Attributed Based Access Control (ABAC) for Web Services ", Proceedings OF THE IEEE International Conference on Web Services (ICWS), 2005.</li> <li>S.V. Nagaraj, " Access Control in Distributed Object Systems: Problems with Access Control Lists", p. 163, IEEE WETICE, 2001.</li> <li>N.Toni, "Attribute Certificates in X.509", HUT TML 2000, Tik-110.501 Seminar on Network Security, Helsinki, Finland 2000.</li> <li>L.John and N. Magnus, "Attribute Certification: An Enabling Technology for Delegation and Role-Based Controls in Distributed Environments", Proceedings of the fourth ACM workshop on RBAC, pp 121 - 130, 1999.</li> <li>K. Reiter, and G. Stubblebine, "Authentication Metric Analysis and Design", ACM Transactions on Information and System Security, Vol. 2, No. 2, Pages 138–158, May 1999,</li> <li>B .Thomas, B. Malte, and K. Birgit, "Valuation of Trust in Open Network ", Proceedings of the European Symposium on Research in Computer Security U.K, 1994,</li> <li>W. Chadwick, "Authorisation using Attributes from Multiple Authorities ", Proceedings of the 15th IEEE International Workshops on Enabling Technologies (WETICE'06), 2006.</li> <li>N. Klingenstein, "Attribute Aggregation and Federated Identity", Proceedings of the 2007 International Symposium on Applications and the Internet Workshops (SAINTW'07), 2007.</li> <li>V. David, M. Blough, and C .David, "Minimal Information Disclosure with Efficiently Verifiable Credentials", appear in DIM'08 (Fourth ACM Workshop on Digital Identity Management), Fairfax, VA, USA, October 2008.</li> <li>A. Squicciarini, E. Bertino, E. Ferrari, F. Paci, and B. Thuraisingham, "PP-Trust-X: A System for Privacy Preserving Trust Negotiations", ACM Transactions on Systems and Information Security, July 2007.</li> <li>C. Ashwin, and S .Dharani , "Decentralised Access Control with Aggregate Key Encryption For Data Stored In Cloud", International Journal of Innovative Research in Computer and Communication Engineering , Vol.2, Special Issue 1, March 2014.</li> <li>V. Roberto, and M. Radko, "AGGREGATION WITH MULTI-ATTRIBUTES: A NEW PERSPECTIVE, 6th International Summer School on Aggregation Operators - AGOP 2011.</li> <li>T.Lakshmi Praveena, V.Ramachandran, and CH. Rupa, "Attribute based Multifactor Authentication for Cloud Applications", International Journal of Computer Applications (0975 – 8887) Volume 80 – No 17, October 2013.</li> <li>B. John, J. Morrice, and W. Mullarkey, "A Multiple Attribute Utility Theory Approach to Ranking and Selection ", Management Science © 2001 INFORMS Vol. 47, No. 6, pp. 800–816, June 2001.</li> <li>P. Ricardo and R. Rita , " Aggregation with generalized mixture operators using weighting functions ", Fuzzy Sets and Systems 137, 43-58, 2003.</li> </ol>	52-55

	<b>Authors:</b>	<b>Meshack Oduor Otieno, Charles K. Kabubo, Zachary Abiero Gariy</b>
	<b>Paper Title:</b>	<b>A Study of Uncalcined Termite Clay Soil as Partial Replacement in Cement as a Sustainable Material for Roofing Tiles in Low Cost Housing Schemes in Kenya</b>
10.	<p><b>Abstract:</b> The need for adequate roofing in developing countries is a vital problem for so many people. The solution of this problem is often linked to the import of iron sheets. The increasing economic burden that many less developed countries have to carry makes it harder to meet vital needs, such as roofing, by means of import. The efforts to find appropriate solutions based on locally available raw materials have thus become more and more important. The cost of conventional materials is too high; a considerable amount of this cost is due to the price of energy for manufacturing and to transportation costs, some materials such as cement poses adverse environmental effect. There is need therefore to provide alternative materials that are locally available, materials that can reverse the adverse environmental effect caused by excessive use of Portland cement and finally, materials that have small energy demand. The overall objective of this research was to assess the suitability of uncalcined termite clay powder partial replacement in cement for use in roofing tile for housing. For this termite clay powder replacement levels of 0 %, 10 %, 20%, 30% and 40% by weight of Ordinary Portland Cement was carried out to determine setting times, compressive strength, flexural strength and absorption rate. The chemical analysis of uncalcined termite clay soil obtained from Bondo district, Usigu sub location, Nduru village in Siaya County was found to be chemically suitable as pozzolanic material (<math>\text{SiO}_2 + \text{Al}_2\text{O}_3 + \text{Fe}_2\text{O}_3 = 93.053 &gt; 70</math>) required as stipulated by the ASTM C 618 standard. The optimal replacement level for termite clay soil was determined to be 10% replacement in cement achieving compressive strength of 44.9N/mm<sup>2</sup>, flexural strength of 6.5N/mm<sup>2</sup> and absorption rate of 6.5. %.</p> <p><b>Keywords:</b> Roofing tiles, partial replacement, compressive strength, flexural strength, absorption rate.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Alp, I, (2009), Pozzolanic characteristics of a natural raw material for use in blended cements; Iranian journal of science &amp; technology, transaction B, engineering, Vol 33, No B4, pp 291-300, printed in the Islamic Republic of Iran</li> <li>Alex K, (2003); An Introduction to green building AIA; RMI Solutions.</li> <li>Anigbogu NA (2011); Framework for efficient development and application of pozzolan cement in Nigeria: Proceeding of NBRI stakeholders' forum,</li> <li>Gerald A.,(2013); Business daily, and page 16-17, September, 13th</li> <li>EAS 148-5:2000; Cement- Test methods- East African Standard.</li> <li>Eric OA, (2014), Influence of calcined clay pozzolana on strength characteristics of Portland cement concrete; International journal of materials science and applications, 3(6): 410-419.</li> <li>ESCAP, RILEM and CIB, (1987), .Building materials for low-income housing, Asia and Pacific Region, Proceedings of Symposium held at the United Nations Building in Bangkok, Thailand.</li> <li>Eugene A , (2014), Influence of mineral admixtures on essential properties of ternary cement blends; Journal of civil engineering and architecture, Vol 8, No.10 pp.1221-1225.</li> <li>Gahlot PS and Deep G (2009); Quality management of cement concrete construction. 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11.	<p><b>Authors:</b></p> <p><b>Paper Title:</b></p> <p><b>Abstract:</b></p> <p>Cobalt sulfide thin films have been prepared by spray pyrolysis method on a glass substrate at constant substrate temperature 300°C. Structural, electrical and optical properties have been investigated. From XRD spectrogram, it is clear that the films are crystalline in nature with hexagonal structure having lattice constants, a=b=3.314 Å and c=4.604 Å. Scanning electron microscope (SEM) shows that Cobalt sulfide film exhibited more or less uniform and smooth surface morphology. Hall measurements indicate n-type semiconducting nature with carrier concentration ~10<sup>15</sup> cm<sup>-3</sup>. The resistivity gradually decreases with increasing temperature which indicates the semiconducting nature of the material. The conductivity increases slowly with increasing the temperature and reaches maximum at the higher temperature. Activation energy is comparatively high (□ □ □ KT) and the values vary from 0.19 eV to 0.38 eV in the low temperature region and 0.42 eV to 0.54 eV in the high temperature region, respectively.</p> <p><b>Keywords:</b> Spray pyrolysis; CoS; XRD; SEM, Electrical properties and Activation energy</p>	60-64

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	<p><b>Authors:</b> <b>Md. Jafri Ahsan, R. K. Issac, Mohd. Imtiyaz</b></p>	
	<p><b>Paper Title:</b> <b>Assessment for Runoff of Upper Betwa Basin by using SWAT Model</b></p>	
12.	<p><b>Abstract:</b> A distributed parameter model, AVSWAT (Arc View soil and water Assessment Tool) was calibrated and validated on monthly basis for the upper Betwa Basin. India extraction of river basin characteristics like land use/ land cover, soil map, digital elevation model (DEM), drainage information of the study area using remote sensing, GIS and collateral data. The main objective was to validate the performance of SWAT and the feasibility of using the model as a simulator of runoff processes at a catchment area Berasia, Bhopal, Raisen and Vidisha of upper Betwa basin. All hydrological and meterological data, were collected from Indian water portal. Land use map of the area were collected from National Bureau of Soil Survey and Land Use Planning, Nagpur, Monthly surface runoff for the monsoon months (1993-2002) were collected for Berasia, Bhopal, Raisen and Vidisha. The model was calibrated and validated for the monsoon seasons of 1993-99 and 2000-02 respectively. The performance of the model was evaluated using statistical and graphical methods to decide the capability of the model simulating the runoff of upper Betwa basin. The calibration period reported coefficient of determination R2 of Berasia, Bhopal, Raisen and Vidisha are 0.97, 0.96, 0.94 and 0.98 respectively. The relative error was obtained as 6.68, 8.00, 10.17 and 15.97 respectively. The value of Nash Sutcliffe model efficiency obtained was 0.98, 0.97, 0.99 and 0.93 of Berasia, Bhopal, Raisen and Vidisha respectively. The validation period reported R2 of 0.98, 0.97, 0.95 and 0.76 of Berasia, Bhopal, Raisen and Vidisha respectively. The relative error are 6.77, 10.61, 7.91 and 10.56 respectively. The value of Nash Sutcliffe model efficiency obtained was 0.99, 0.99, 0.95 and 0.99 of Berasia, Bhopal, Raisen and Vidisha for monthly observed and simulated runoff. Calibration and validation results revealed that model was/ predicting total surface runoff, at Berasia, Bhopal, Raisen and Vidisha of Upper Betwa Basin accurately. The calibrated and validated model will be used for both long – term and storm event water quantity and quality evaluations throughout the basin.</p> <p><b>Keywords:</b> AVSWATX, land use / land cover, runoff, calibration, validation, Image processing, Remote Sensing and GIS</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Arnold, J. G., Williams, J. R., Nick, A.D., Sammons, N.B., (1998). SWRRB: A basin scale simulation model for soil and water resources management. Texas A and M University press, College Station, TX, pp 125.</li> <li>Herbst, M., Hardelauf, H., Harms, R., Vanderborcht, J., and Vereecken, H. (2005b) "Pesticide fate at regional scale: Development of an integrated model approach and application", Physics and Chemistry of the Earth, 30(8-10): 542-549.</li> <li>Jasrotia, A.S, Dhiman S. 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	<b>Paper Title:</b> <b>SVPWM based Transformer less Wind Energy Conversion System for 3 phase 3 level Neutral Point Clamped Inverter</b>
	<p><b>Abstract:</b> The Multilevel inverters are highly being used in high-power medium voltage applications due to their better performance compared to two-level inverters. Among various types of multilevel inverters, neutral point clamped three-level inverter (NPCTLI) is suitable for a Transformerless grid-connected wind energy conversion system. As it avoids leakage currents, common mode voltage and capacitor balancing problems. Split inductor is used to interconnect inverter with grid connected system which avoids the usage of transformer. While using split inductor neutral point clamped multilevel inverter, shoot-through problems are producing in the bridge legs of an NPC-TLI. Space Vector pulse width modulation Control (SVPWMC) offers an excellent current control and improved voltage performance to NPCTLI, which reduced amount of total harmonic distortion present in system. The proposed topology guarantees for no shoot-through possibility and capacitor balancing problem. The new topology is referred to as split-inductor NPCTLI (SI-NPCTLI). Finally, the simulation results of a proposed SI-NPCTLI system verified using MATLAB SIMULINK.</p> <p><b>Keywords:</b> Wind energy conversion system, PMSG, Space Vector pulse width modulation (SVPWM), Neutral point clamped three-level inverter (NPCTLI).</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. H. Berthold, M. Durstewitz and K. Rohrig, "Reliability of wind turbines," Wind Energy, Springer Berlin Heidelberg, 2007, pp. 329-332.</li> <li>2. Z. Chen, J. M. Guerrero, and F. Blaabjerg, "A review of the state of the art of power electronics for wind turbines," IEEE Trans. Power Electron., vol. 24, no. 8, pp. 1859–1875, Aug. 2009.</li> <li>3. Benelghali, Seifeddine, M. E. H. Benbouzid, and Jean Frédéric Charpentier. "Comparison of PMSG and DFIG for marine current turbine applications." Electrical Machines (ICEM), 2010 XIX International Conference on. IEEE, 2010..</li> <li>4. 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	<b>Paper Title:</b> <b>Hydrogen Production by Water Electrolysis: A Review of Alkaline Water Electrolysis, PEM Water Electrolysis and High Temperature Water Electrolysis</b>
<b>14.</b>	<p><b>Abstract:</b> Water electrolysis is a quite old technology started around two centuries back, but promising technology for hydrogen production. This work reviewed the development, crisis and significance, past, present and future of the different water electrolysis techniques. In this work thermodynamics, energy requirement and efficiencies of electrolysis processes are reviewed. Alkaline water electrolysis, polymer electrolysis membrane (PEM) and High temperature electrolysis are reviewed and compared. Low share of water electrolysis for hydrogen production is due to cost ineffective, high maintenance, low durability and stability and low efficiency compare to other available technologies. Current technology and knowledge of water electrolysis are studied and reviewed for where the modifications and development required for hydrogen production. This review paper analyzes the energy requirement, practical cell voltage, efficiency of process, temperature and pressure effects on potential kinetics of hydrogen production and effect of electrode materials on the conventional water electrolysis for Alkaline electrolysis, PEM electrolysis and High Temperature Electrolysis.</p> <p><b>Keywords:</b> Hydrogen Production, Water electrolysis, Electrolyte, Electrode, Electrocatalyst, PEM.</p>

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	<p><b>Authors:</b> <b>Ahmed Tahar, Mohamed Naceur Abdelkrim</b></p>	
	<p><b>Paper Title:</b> <b>Output Feedback Robust Stabilization of the Decoupled Multiple Model</b></p>	
15.	<p><b>Abstract:</b> This paper aims to design a controller to robustly stabilize uncertain nonlinear systems with norm bounded uncertainties and unmeasured state variables via decoupled multi-model. The stabilization conditions are given in the form of linear matrix inequalities. Sufficient conditions are derived for robust stabilization in the sense of Lyapunov asymptotic stability and are formulated in the format of linear matrix inequalities (LMIs). The effectiveness of the proposed decoupled multi-model controller and multi-observer design methodology is finally demonstrated through numerical simulations.</p> <p><b>Keywords:</b> Decoupled multiple model, LMI, Multi-observer, robust control.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. E. H. Mamdani and S. Assilian, "An experiment in linguistic synthesis with a fuzzy logic controller", International Journal of Man-Machine Studies, vol. 7, pp. 1–13, January 1975.</li> <li>2. T. Takagi and M. 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	<p><b>Authors:</b> <b>Siva, Elizabeth, Ajay-D-Vimalraj</b></p>	
	<p><b>Paper Title:</b> <b>State Feedback Observer Design for a Three Phase Induction Machine using Singular Value Decomposition Method of Pole Placement</b></p>	
16.	<p><b>Abstract:</b> This paper discusses the tracking of the desired poles by designing a state feedback controller and observer using Singular Value Decomposition method of pole placement for time varying systems. As the fluxes are taken as state variables, the measurement of these variables might become tedious in some cases. Hence, the state variables are fed back to realize control over the system. The accuracy of the values obtained from the controller may not be precise owing to the price, placing and disturbances induced by sensors. Hence an observer comes in handy and the characteristics for different torque conditions are observed.</p> <p><b>Keywords:</b> matrix concatenate, pole placement, singular value decomposition, state feedback.</p> <p><b>References:</b></p>	101-109

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<b>Authors:</b>	<b>Y. M. Mahrous, Abdullah S. Al-Ghamdi, A. M. M. Elfeki</b>
<b>Paper Title:</b>	<b>Modeling Chlorine Decay in Pipes using Two-State Random Walk Approach</b>
<b>Abstract:</b>	As water moves through a distribution network, maintaining residual chlorine is essential to prevent the regrowth or recontamination of pathogens and inactivate harmful micro-organisms that might be present. On the other hand, chlorine should be kept below a certain level because of concerns about formation of carcinogenic disinfection by-products within the distribution system. In this paper, a stochastic model is proposed as a tool to offer a cost-effective way to study the spatial and temporal variation of a number of water quality constituents, including chlorine. Under a known set of hydraulic conditions and source input patterns, a two state random walk model is developed to simulate the decay of chlorine in a single pipe by solving the advective-transport equation. The model predicts how the concentration of dissolved chlorine varies with time and space throughout the flow. Linear non-equilibrium particle transfer from water bulk phase (state 1) to pipe wall phase (state 2) is handled using stochastic analogue of two-state Markov-chain process with absorbing state. The model is verified by comparison with experimental observations available in the literature, EPANET 2 (Time- driven method) and other models.
<b>Keywords:</b>	chlorine decay, Markov-chain, Random walk, pipes, stochastic, Transport equation.
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	<b>Authors:</b>	<b>P. Siva, E. Shanmuga Priya, P. Ajay-D-Vimalraj</b>	
	<b>Paper Title:</b>	<b>Maximum Power Tracking of Doubly-Fed Induction Generator using Adaptive Neuro-Fuzzy Inference System</b>	
18.	<p><b>Abstract:</b> This paper deals with the Artificial Intelligent control of Doubly-Fed Induction Generator using Adaptive Neuro-Fuzzy Inference System in order to generate maximum power at variable wind speed. The rotor control is achieved here using the combined features of neural network and fuzzy logic controller.</p> <p><b>Keywords:</b> Doubly-fed Induction Generator (DFIG), Wind Energy Conversion System (WECS), Adaptive Neuro-Fuzzy Inference System (ANFIS)</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>G. O. Young, “Synthetic structure of industrial plastics (Book style with paper title and editor),” in Plastics, 2nd ed. vol. 3, J. Peters, Ed. New York: McGraw-Hill, 1964, pp. 15–64.</li> <li>Michael K. Bourdoulis and Antonio T. Alexandridis, “A new controller design and analysis of DFIG Wind Turbine systems for MPP operation”, IEEE Transaction, 2013.</li> <li>Akira Kaneko, Naoyuki Hara and Keiji Konishi, “Model predictive control of DFIG based wind turbines”, American control conference, June 2012.</li> <li>Aicha Daoud and Fatma Ben Salem, “Direct Power Control of a Doubly Fed Induction Generator Dedicated to Wind Energy Conversions”, IEEE Transaction, 2014.</li> <li>Karim Belmokhtar, Mamadou. L. Doumbia and Kodjo Agbossou, “Modelling and Fuzzy Logic Control of DFIG based Wind Energy Conversion Systems”, IEEE Transaction, 2012.</li> <li>Yu Zou, Malik Elbuluk and Yilmaz Sozer, “A Novel Maximum Power Points Tracking (MPPT) operation of Doubly-Fed Induction Generator (DFIG) Wind Power System”, IEEE Transaction, 2012.</li> <li>Sasidharan Sridharan, Weerakorn Ongsakul, J.G. Singh, I Made Warthana and Kittavit Buayai, “Development of PSO based control Algorithms for Maximizing Wind Power Penetration”, IEEE Transaction, 2011.</li> <li>George C. Konstantopoulos and Antonio T. Alexandridis, “Full-scale Modelling, Control and Analysis of Grid-Connected Wind Turbine Induction Generators With Back-to-Back AC/DC/AC Converters”, IEEE Transaction, 2013.</li> <li>Aicha Daoud and Fatma Ben Salem, “Direct power control of Doubly-Fed Induction Generator dedicated to Wind Energy Conversions”, IEEE Transaction, 2014.</li> <li>Burak Ozpineci, Leon M. Tolbert, “Simulink implementation of Induction Machine model-A Modular Approach”, IEEE Transaction, 2003.</li> <li>Mohammed HILAL, Mohammed MAAROUFI and Mohammed OUASSAID, “Doubly Fed Induction Generator Wind Turbine Control for a maximum Power Extraction”, IEEE Transaction, 2010.</li> <li>T. Salma and R. Yokeeswaran, “Pitch control of DFIG based Wind Energy Conversion System for Maximum Power Point Tracking”, IJAREEIE, December 2013.</li> <li>Zakaria Kara and Kamel Bara, “Wind energy conversion based doubly fed induction generator controlled by direct matrix converter”, IEEE Transactions, 2014.</li> <li>Noor Ullah, “ANFIS Based Models for Accessing Quality of Wikipedia Articles”, May 2010.</li> <li>Juh-Shing Roger Jang, “ANFIS: Adaptive-Network-Based Fuzzy Inference System”, IEEE Transactions May/June 1993.</li> <li>Heikki Koivo, “ANFIS (Adaptive Neuro-Fuzzy Inference System)”, 2000.</li> <li>A.P.Papilinski, “Adaptive Neuro-Fuzzy Inference System (ANFIS)”, Neuro-Fuzzy Computing, May 20, 2005.</li> <li>Chiung Hsing Chen, Chih-Ming Hong and Fu-Sheng Cheng, “ Intelligent speed sensorless Maximum Power Point Tracking control for Wind Generation System”, Electrical Power and Energy Systems, 42(2012), 399-407.</li> <li>L.G. Gonzalez, E. Figueres, G. Garcera and O. Carranza, “Maximum-power-point tracking with reduced mechanical stress applied to wind-energy-conversion-systems”, Applied Energy, 87(2010), 2304-2312.</li> <li>Mohammed Sleiman, Bachir Kedjar, Abdelhamid Hamidi, Kamal Al-Haddad and Hadi Y. Kanaan, “Modelling, Control and Simulation of DFIG for Maximum Power Point Tracking” IEEE Transaction, 2013.</li> </ol>		116-120

	<b>Authors:</b>	<b>Luong Thai Ngoc, Vo Thanh Tu</b>	
	<b>Paper Title:</b>	<b>Proposing AODVSC Protocol to Detect Black Hole Attacks in Mobile Ad-hoc Network</b>	
19.	<p><b>Abstract:</b> Mobile Ad-hoc Network (MANET) is a kind of wireless network, which has no infrastructure and is a self configuring wireless network of mobile nodes, each node on the MANET acts like a router which forwards the packets. Due to these properties, MANET is vulnerable to attacks, routing attack is the most common one. The black hole attack is a kind of routing attack made by a malicious node on MANET. This article proposes AODVSC improved from AODV protocol which uses SC (Safe Cycle) solution to detect black hole attacks. The SC solution uses the “distance” from the current node to all neighboring nodes based on SN (sequence number) values. The simulated installation and performance evaluation of AODVSC and AODV protocols in the normal network environment where there are black hole node attacks on the network simulator NS2 was also presented to evaluation improved protocol.</p> <p><b>Keywords:</b> AODV, AODVSC, black hole, detect black hole attacks, mobile ad hoc network, routing protocols.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Alekha Kumar Mishra, Bibhu Dutta Sahoo, “A modified Adaptive SAODV prototype for performance enhancement in MANET”, IJ-CAETS, Vol 1, Issue 2, 2010, pp. 443-447.</li> <li>Anu Bala, Raj Kumari and Jagpreet Singh, “Investigation of Blackhole Attack on AODV in MANET”, journal of emerging technologies in web intelligence, vol. 2, no. 2, 2010, pp. 96-100</li> <li>Cerri D, Ghioni A, “Securing AODV: The A-SAODV Secure Routing Prototype”, IEEE Communication Magazine, 2008, pp. 120-125.</li> <li>Ei Ei Khin, and Thandar Phyu, “Mitigating Scheme for Black Hole Attack in AODV Routing Protocol”, ICAET, 2014, pp. 105-109.</li> </ol>		121-125

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<b>Authors:</b>	<b>Mohammed M. Alkhwilani</b>
<b>Paper Title:</b>	<b>Application of SMART, TOPSIS, and VIKOR Systems in Joint Admission Control</b>

**Abstract:** Joint Admission Control (JAC) handles the admission of all new or handoff service requests in the modern heterogeneous networks and allocates the required resources and guarantees the QoS constraints for the service. JAC is a multi-criteria problem in nature, and the usage of MCDM system is mandatory to decrease the influence of the dissimilar, imprecise, and contradictory measurements for the JAC criteria coming from different sources. In this paper, three different decision support systems are developed to address the JAC problem in the modern heterogeneous networks. These systems use SMART, TOPSIS, and VIKOR MCDM methods. Illustrative numerical examples for the developed systems are presented. The examples show that the choice of the MCDM tool can directly affect the ranking order of the available access networks, and hence, the selection of the MCDM methods is highly critical in any JAC solution.

**Keywords:** Joint Admission Control (JAC), heterogeneous networks, QoS, MCDM, TOPSIS, VIKOR MCDM methods.

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	<p><b>Authors:</b> Muhamad Razuhanafi Mat Yazid, Mohd Azizul Ladim</p> <p><b>Paper Title:</b> Urban Design and Active-Transport</p>	<p><b>Abstract:</b> Active transport is vital to ensure urban living in a clean, healthy and quality environment. Today, rapid motorisation in Malaysia has been associated with congestion and accidents. Besides, carbon gas emission is polluted the environment and grossly affect people's quality of life. This study is aimed to introduce a new approach to change the attitude of urban population to shift to active transport for short trips. The study employed a survey method, where a set of questionnaire was distributed to 400 samples involved population of five sub-districts in Kota Bharu, which is within 12 km radius from the city centre. The data indicated that almost 100% of the respondents and their households use passive transport for daily activities. Whereas 52% of respondents agreed to switch to active transport and the rest did not agree. Maximum distance to walk is not more that 5 km radius and cycling 10 km. Willingness to shift to active transport based on state preference survey is greatly influence by urban design that foster safety and closeness between activity centres. A study using Theory Planned Behaviour has shown that the highest positive value are health benefits (0.95), the influence of neighbours and close friends (0.95) and travel time to reach the destination (0.93). These two studies indicated that the willingness of Kota Bharu residences to shift to active transport are greatly influenced by compact urban design with open, wide and direct active transport facilities and good neighbourhood environment.</p> <p><b>Keywords:</b> Theory planned behavior, passive transport, active transport, cycling, walking, urban design.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. P. Rietveld, "Biking and Walking : The Position of Non- Motorised Transport Modes in Transport Systems," Amsterdam, 2001.</li> <li>2. C. Palmer, A. Astrop, M. Babu, and D. Maunder, "Attitudes and travel behavior of households in Pure, India," International symposium on infrastructure of the future. Bangalore, India, Transport Research Laboratory, 1996.</li> <li>3. M. G. Badami and M. Haider, "An analysis of public bus transit performance in Indian cities," Transportation Research Part A: Policy and Practice, vol. 41, no. 10, pp. 961-981, Dec. 2007.</li> <li>4. S. R. Aiken and Leigh, Development and Environment in Peninsular Malaysia. McGraw-Hill Education Singapore, 1983, p. 350.</li> <li>5. K. Martens, "The bicycle as a feeder mode: experiences from three European countries," Transportation Research Part D: Transport and Environment, vol. 9, no. 4, pp. 281-294, Jul. 2004.</li> <li>6. M. M. Alterkawi, "A computer simulation analysis for optimizing bus stops spacing: The case of Riyadh, Saudi Arabia," Habitat International, vol. 30, no. 3, pp. 500-508, Sep. 2006.</li> <li>7. G. Beirão and J. a. Sarsfield Cabral, "Understanding attitudes towards public transport and private car: A qualitative study," Transport Policy, vol. 14, no. 6, pp. 478-489, Nov. 2007.</li> <li>8. Jamsiah, M. Idris, S. Ezat, and Norfazilah, "Amalan senaman dan faktor-faktor yang mempengaruhinya di kalangan penduduk kg.Bangi, Daerah Hulu Langat, Selangor D.E. Malaysia.," Jabatan Kesihatan Masyarakat 2007:Jilid 13 Bil.1, vol. 91737825, pp. 38-43, 2007.</li> <li>9. Jamsiah, Rosnah, and N. Hassim, "Journal of Community Health 2010: Vol 16 Number 1 ORIGINAL ARTICLE," vol. 16, no. 1, pp. 2-9, 2010.</li> <li>10. WHO, "Obesity:Preventing and Manging the Global Epidemic. Report of a WHO Consultant on Obesity," Geneva, 1998.</li> <li>11. A. Ahern and N. Tapley, "The use of stated preference techniques to model modal choices on interurban trips in Ireland," Transportation Research Part A: Policy and Practice, vol. 42, no. 1, pp. 15-27, Jan. 2008.</li> <li>12. J. E. Bartlett, J. W. Kotrlík, and C. C. Higgins, "Organizational Research : Determining Appropriate Sample Size in Survey Research," Information Technology, Learning and Performance, vol. 19, no. 1, pp. 43-50, 2001</li> <li>13. I. J. Myung, "Tutorial on maximum likelihood estimation," vol. 47, pp. 90-100, 2003.</li> <li>14. S. Hausteim and M. Huneke, "Reduced use of environmentally friendly modes of transportation caused by perceived mobility necessities:An extension of the theory of planned behavior," Journal of Applied Social Psychology, vol. 37, no. 8, pp. 1856-1883, 2007.</li> <li>15. K. Ambak, R. Ismail, R. A. Abdullah, A. A. Latiff, M. E. Sanik, U. Tun, H. Onn, P. Raja, F. S. Sciences, and U. T. Hussein, "Application of Technology Acceptance Model in Predicting Behavioral Intention to Use Safety Helmet Reminder System," vol. 5, no. 3, pp. 881-888, 2013.</li> </ol>
21.	<p><b>Authors:</b> Sajith A.G, Hariharan.S</p> <p><b>Paper Title:</b> Spatial fuzzy C-means Clustering based Liver And Liver Tumor Segmentation on Contrast Enhanced CT Images</p>	<p><b>Abstract:</b> Analysis of CT images plays an important role in liver tumour segmentation. Segmentation methods include thresholding, region growing, splitting and merging etc. Segmentation methods are of two types fully automatic and semi-automatic. It is the first and essential step for the diagnosis of liver diseases. Region based segmentation plays an important role in CT liver image analysis. In this paper a hybrid image processing method is presented based on spatial fuzzy C means clustering combined with Mumford Shah model. In image processing Mumford shah model is used for minimizing an energy function involving a piecewise smooth representation of the image. Thus we can detect interior contours automatically enhanced the blurred contours and increase the robustness of an image with less number of iterations. Thus we can improve the segmentation of liver image thereby increasing the detection of tumour effectively.</p> <p><b>Keywords:</b> Spatial FCM, Mumford Shah model, Image segmentation, CT liver image analysis</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Suetens,P.,2002. Fundamentals of Medical Imaging.Cambridge University Press,New York</li> <li>2. Oliveira DAB, Feitosa RQ, Correia MM: Automatic Couinaud liver and veins segmentation from CT images. InBiosignals - International Conference on Bio-Inspired Systems and Signal Processing. Volume 1. Funchal; 2008., pp.249-252</li> <li>3. Bezdek, J.C.: Pattern Recognition with Fuzzy Objective Function Algorithms. New York: Plenum Press, 1981</li> <li>4. Seif El-Dawlatly, Hossam Osman, Hussein Shahein, "New Spatial FCM approach with Application to SAR Target Clustering", ICSP, 2006</li> <li>5. Wu Qiu, Rui Wang, Feng Xiao, Mingyue Ding, "Research on Fuzzy Enhancement in the Diagnosis of liver tumor from B-mode Ultrasound Images", IEEE: International Conference on Intelligent Computation and Bio-Medical Instrumentation, 74 - 80, 2011.</li> <li>6. Masuda Y, Tateyama T, Wei Xiong, Jiayin Zhou, Wakamiya M, Kanasaki S, Furukawa A, Yen Wei Chen, "Liver tumor detection in CT images by adaptive contrast enhancement and the EM/MPM algorithm", IEEE: International Conference on Image Processing, 1421 - 1424, 2011.</li> </ol>

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	<p><b>Authors:</b> Vinit Kumar Shukla, Megha Mittal</p> <p><b>Paper Title:</b> Human Resource Management Challenges and Purposed Solution: An Analysis</p> <p><b>Abstract:</b> This paper define the various future challenges in the field of Human resource management and the possible solutions to overcome them. The responsibilities of HR manager have gradually become broader and more strategic because of globalization. The function of human resources (HR) departments is administrative and common to all organizations. Organizations may have formalized selection, evaluation, and payroll processes. Management of "human capital" progressed to an imperative and complex process. It investigates three aspects of human resource management facing future challenges, operational, technology and globalization.</p> <p><b>Keywords:</b> HR, Gobalization, Human Capital</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Ashwathappa K. ,( 2006) Human Resource Management, Tata McGraw Hills , New Delhi, 3rd edition</li> <li>2. Bhatia S.K.,(2005) International Human Resource Management A global perspective, Deep &amp; Deep Publications, New Delhi.</li> <li>3. Brooks S, Wiley JW &amp; Hause E (2006). "Using Employee and customer perspectives to improve Organizational Performance." In L Fogli (Ed.) Customer Service Delivery: Research and Best Practices, Jossey Bass, 52-82.</li> <li>4. Buck J.M., Watson J.L. (2002) "Retaining Staff Employees: The Relationship between Human Resources Management Strategies and Organizational Commitment", Innovative Higher Education, Vol. 26, No. 3 pp175-193</li> <li>5. Carolyn Hirschman, "Time for a Change," HR Magazine, August 1998, 81-87.</li> <li>6. Challenger JA (1998) There is no future for the workplace. In: The Futurist, Washington Oct. 1998, pp 16-20</li> <li>7. Charman, A. (1999) Global mergers and acquisitions: the human resource challenge. International Focus (Society for Human Resource Management)</li> <li>8. Evans P, Doz Y (1992) Dualities. A Paradigm for Human Resource and Organizational Development in Complex. Multinationals. Globalizing Management, New York, pp85-106</li> <li>9. B. Pattanayak, Human Resource Management(PHI Learning Private Limited,2009).</li> <li>10. L.M. Prasad, Human Resource Management (Sultan Chand &amp; Sons: Educational Publishers, 2006).</li> <li>11. H John Bernardin, Human Resource Management (Tata McGraw-Hill Publishing Company Limited, 2007)</li> <li>12. P.C. Tripathi, Human Resource Development (Sultan Chand &amp; Sons: Educational Publishers, 2006)</li> <li>13. V S P Rao, Human resource Management (Excel Books, Second Edition, 2010)</li> <li>14. Mohan Thite, Michael J. Kavanagh, Evolution of Human Resource Management and Human Resource Information Systems.</li> </ol>	<b>140-141</b>
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	<p><b>Authors:</b> M. Bommy, M. Dhanalakshmi, A. Rajesh</p> <p><b>Paper Title:</b> Enhanced Hybrid Multipath Routing Protocol Using an Priority Acknowledgment Table (PAT)</p> <p><b>Abstract:</b> Route discovery and route maintenance concerns a main issue in MANET. To address this problem we propose an efficient hybrid routing technique using Priority Acknowledgement Table. Our proposed work uses both On-demand and Table driven routing protocols for continuous route discovery between source and destination in multipath and multicast environment. Here we use a Priority Acknowledgement Table technique to find the shortest alternative path. In initial stage a single route is discovered using On-Demand routing protocol. From that route each node involves in continuous discovery of another shortest path to reach destination. At that time if a node finds more than two alternate paths, then it is declared as DPN and a temporary PAT is constructed from which again a new route is discovered to reach the destination. In our proposed work if route failure occurs, route rediscovery starts from DPN instead of from original source node by which efficiency is increased.</p> <p><b>Keywords:</b> MANET (Mobile Adhoc Network), PAT (priority Acknowledgment Table), DPN (Demand processing Node).</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. R.L.Lagendijk, J.F.C.M.de Jongh, "Multipath Routing in Mobile Ad Hoc Networks", Traineeship Report, Version 1.2, TU-Delft/TNO, 2003.</li> <li>2. D. Jagadeesan and S.K. Srivatsa, Multipath Routing Protocol for Effective Local Route Recovery in Mobile Ad hoc Network, Journal of Computer Science, PP: 1143- 1149, 2012.</li> <li>3. D. B. Johnson and D. A. Maltz, "Dynamic Source Routing in Ad HocWireless Networks, Academic Publishers, vol. 5, pp. 153-181, 1996.</li> </ol>	<b>142-144</b>
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25.	<b>Authors:</b>	<b>K. Raghuveer, Ananth G S</b>
	<b>Paper Title:</b>	<b>A Novel Comparison between Apple IOS 8 VS Android 5.0 Lollipop for Best Features and Sustainability of the Modern World Mobile OS</b>
	<p><b>Abstract:</b> Today in this modern computing world, mobile has become miniature in nature; but not to forget the power the small devices have. For the mobile devices to hold so much of power comes not just from the hardware the vendors provide but also from the software that runs on these hardware. This paper compares the good and the bad features of the recently released Apple iOS 8 and Android 5.0 Lollipop and finally tries to resolve the best amongst the two.</p> <p><b>Keywords:</b> Mobile OS, smartphones, Apple iOS 8, Android L, Lollipop</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Inputs from www.in.techradar.com</li> <li>2. www.wikipedia.com</li> <li>3. Referernces from www.techhive.com</li> <li>4. www.ubergizmo.com</li> <li>5. The best and the worst of Android Lollipop (www.forbes.com)</li> <li>6. www.arstechnica.com, battery consumption of Android L</li> </ol>	
26.	<b>Authors:</b>	<b>Mustafa. M. Ali. Alfaki, Ajit Paul, Shalini Bhawana Masih</b>
	<b>Paper Title:</b>	<b>The Level of Satisfaction of Foreign Students at Sam Higginbottom University Allahabad India for Administrative and Academic Performance of Thier University</b>
	<p><b>Abstract:</b> The Summary-The satisfaction of the students has become one of the modern approaches to the development of higher education in various countries in the world and an essential element of the quality and reliability in higher education. Therefore, the objective of this research is to measure the level of satisfaction of foreign students at Sam Higginbottom University Allahabad from administrative and academic performance of the university. To achieve the objectives of the study, a questionnaire consisting (24) component was distributed among (50) foreign students of all disciplines at the University. After the statistical analysis of the results of the questionnaire, it showed that the level of satisfaction of students in 2general was acceptable, and in some cases is good, but not excellent. Both researchers recommend that satisfaction of students is taken into account as a component of quality and reliability, and various university departments seek to meet the needs of students and their expectations.</p> <p><b>Keywords:</b> component was distributed among (50) foreign students of all disciplines at the University</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. ronin J. J., Jr. and Steven A. T. (1994): SERVPERF versus SERVQUAL: Reconciling Performance - Based and Perception - Minus - Expectations Measurement of Service Quality, Journal of Marketing, 58 (January), 125-131.</li> <li>2. Burch, E., Rogers, H. P., and Underwood, J.(1995): Exploring Servers : An Empirical Investigation of the Importance-Performance, Service Quality Relationship in the Uniform Rental Industry .</li> <li>3. Trraf and Johanna (2003) " Problems of higher studies in Syrian universities from masters and doctorate students perspective " Damascus University Journal , Volume 19, issue 1 .</li> <li>4. Kotler, P. (2001): Marketing Management: Analysis lanning-Implement and Control, India, Prntice Hall, Inc.</li> <li>5. Kara, A. and De-Shield, O. W. (2004): Business Student Satisfaction, Intentions and Retention in Higher Education: An Empirical Investigation, Pennsylvania State University-York Campus.</li> <li>6. Baykal, Ulkuet al (2005): Determining Student Satisfaction in a Nursing College, Nurse Education Today, Volume 25, issue 4, pages 255-262.</li> <li>7. Alssari , Abdullah and Zaid ( 2006 ) " The satisfaction of students of the faculty of Education at Sultan Qaboos University for overseeing the academic and the nature of their expectation of it Jornal of the faculty of Education University of United Arab Emirates year ( 21 ) , issue 23 .</li> <li>8. Al hajjar and Mabhooh ( 2008 ) " Al- Aqsa Palestine university student's satisfaction with the quality of services in the registration process and academic guidance" <a href="http://www.arab.acrao.org/28/research/13.pdf">http://www.arab.acrao.org/28/research/13.pdf</a></li> </ol>	
27.	<b>Authors:</b>	<b>Priyanka Shivhare, Vinay Gupta</b>
	<b>Paper Title:</b>	<b>Review of Image Segmentation Techniques Including Pre &amp; Post Processing Operations</b>
	<p><b>Abstract:</b> Image Segmentation has been an area for a long time which is providing opportunities to do research work. Image segmentation is most of judging or analyzing function in image processing and analysis. Image segmentation is a process of partitioning an image into meaningful regions that are homogenous or similar and inhomogeneous in some characteristics. Image segmentation results have an effect on image analysis and it following higher order tasks. Image analysis includes object description and representation, feature measurement. Higher order task follows classification of object.. Hence characterization, visualization of region of interest in any image,</p>	

delineation plays an important role in image segmentation .These image segmentation techniques need comparative analysis for further development and modifications for continuous and consistent improvement. Hence, in this paper an overview of image segmentation and its present techniques is presented which demands a lot of research work.

**Keywords:** Image, Image Segmentation, Segmentation Techniques..

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**Authors:** Eask Fernando, R. U. Kuruppu

**Paper Title:** Tension Variation in Sectional Warping, Part I: Mathematical Modeling of Yarn Tension in a Creel

28.

**Abstract:** The warping process is one of the weaving preparation processes to produce weaver's beams which uses on weaving machines to produce grey fabrics. In sectional warping several hundreds of yarn from supply packages placed on a creel are wound onto a sectional warping drum as sections and then beaming off all warp yarns from the drum to the warper's beam, which is used for fabric production with or without the subsequent process known as sizing. The uniform and even yarn tension in warping process is vital to produce high quality fabrics on looms with high efficiency. The authors attempted to theoretically interpret in terms of mathematical modeling the warp yarn tension in the yarn path of the creel with due consideration to various parameters in sectional warping. Further theoretically model the warp tension variation according to the geometrical position of the package on a sectional warping creel. This paper reports a study of tension variation of cotton yarn unwinding from the supply package up to the exit point of the creel of a Kakinoki sectional warping machine. Authors have developed a mathematical model to analyze tension variation within the warping creel for the packages with variable diameters at different positions. Based on the developed mathematical model, tension was calculated at various places along the yarn path.

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**Keywords:** Sectional warping, creel, tension model, geometrical position, yarn unwinding

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<b>Authors:</b>	<b>Anurag Sharma</b>
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<b>Paper Title:</b>	<b>Design Study of End Effectors</b>
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	<p><b>Abstract:</b> Robots play a vital role in automation of machines. The performance of robotic manipulator is completed by the end effectors. The choice of end effector is depended on the type of task to be performed. For holding the component and pick &amp; place activities to the specified location gripper is selected and for different types of workshop operations various tools are fixed on the manipulator e.g. welding electrode holder, painting spray gun etc.</p>	
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	<p><b>Keywords:</b> Robot, grippers, end effectors, manipulator, workshop operations</p>	
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<b>Authors:</b>	<b>Nisha Rajan S, Akash Rajan, Binulal B. R</b>
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<b>Paper Title:</b>	<b>Input Maping and Simulation Analysis using Adaptive Network Based Fuzzy Inference System</b>
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	<p><b>Abstract:</b> Fuzzy logic control systems are structured numerical estimators. They combine both the numerical process and human like reasoning. Neural networks are numerical trainable dynamical systems that are able to emulate human brain functions; their connectionist structure can be used to find the proper parameters and structures that resemble human thinking rules for fuzzy logic controllers. Generally fuzzy logic is best applied to non linear, time varying, ill- defined systems, which are too complex for conventional control systems to apply. In this paper a new combinational connectionist structure is proposed which exploits the advantages of both the fuzzy and neural networks avoiding the rule-matching time of the inference engine in the traditional fuzzy logic system. Some examples are presented using MATLAB simulation to illustrate the performance and applicability of the proposed connectionist model.</p>	
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	<p><b>Keywords:</b> Fuzzifier, membership function, receptive field, hybrid learning, adaptivity, input-output mapping, ANFIS, training, epoch</p>	
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<b>30.</b>	<p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Fu-Chuang Chen, "Back propagation Neural Network for Non linear Self-tuning Adaptive Control", <i>Proc. IEEE Intelligent Machine</i>, 1989, pp. 274-279</li> <li>2. J S Roger Jang and C T Sun, " Functionalequivalance between radial basis function networks and fuzzy inference systems", <i>IEEE trans. Neural Networks</i>, vol.4, 1993 pp 156-159</li> <li>3. Jyh-Shing Roger Jang, "ANFIS: Adaptive Network Based Fuzzy Inference System, <i>IEEE Transactions on systems and cybernetics</i>", Vol.23, No.3, 1993, pp.665-685</li> <li>4. Jang, J.-S.R., Sun, C.-T &amp; Mizutani, E. (1997) <i>Neuro-Fuzzy and Soft Computing: A Computational Approach to Learning and Machine Intelligence</i>. Prentice Hall, Upper Saddle River, New Jersey, USA, 1997.</li> <li>5. Ozgur Kisi, "Suspended sediment estimation using neuro-fuzzy and neural network approaches", <i>Hydrological Sciences–Journal–des Sciences Hydrologiques</i>, 50 (4), August 2005 pp. 683-696.</li> <li>6. Zhi Rui Huang and M.N. Uddin, "Development of a simplified Neuro- Fuzzy controller for an IM drive," in the Proc. of IEEE International Conf. on Industrial Technology 2006 , 15-17 Dec. 2006, pp. 63–68.</li> <li>7. M. N. Uddin Z. R. Huang and Md. M. Chy "A simplified self-tuned neuro-fuzzy controller based speed control of induction motor drives," in the Proc. Of PES General Meeting 2007, 24-28 June. 2007, pp. 1–8.</li> <li>8. S. Chiu, "Fuzzy Model Identification Based on Cluster Estimation," <i>Journal of Intelligent and Fuzzy Systems</i>, Vol. 2, No. 3, 1994, pp. 267-278</li> <li>9. Zadah L (1965) <i>Fuzzy sets</i>. National Science Foundation under Grant, U.S</li> <li>10. Negnevitsky M, et al. (2005) <i>Fuzzy expert system</i>. In: (ed) <i>Artificial intelligent a guide to intelligent systems</i>, 2nd edition. Pearson Education, England</li> <li>11. Kolokotsa, D., Tsiavos, D., Stavrakakis, G. S., Kalaitzakis, K., and Antonidakis, E., 2001, "Advanced Fuzzy Logic Controllers Design and Evaluation for Building Occupants Thermal-Visual Comfort and Indoor Air Quality Satisfaction," <i>Energy Build.</i>, 33_6_, pp. 531–543</li> <li>12. Westphalen, D., Roth, K. W., and Brodrick, J., 2003, "Fuzzy Logic for Controls," <i>ASHRAE J.</i>, 45_6_, pp. 31–47.</li> </ol>	<b>169-174</b>
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31.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Subhradeep Pal, Bharat Gaikwad, Aman Sharma</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>FYDP Management System with a Novel Pedagogical Strategy for Study of Science at Bachelor's &amp; Master's Level</b></td> </tr> </table> <p><b>Abstract:</b> Learning management systems have become a revolution in the field of education. Privatisation of education has paved the way for such technology. Nowadays even government institutions have started incorporating virtual learning environment in their systems. Learning management system is a broad domain. It has a diverse range of features which address variety of problems that were earlier faced by academic circles. One of the features that attend the needs of final year students in bachelor and master's level is a Final Year Degree Project (FYDP) handler system. But not much has been done to improve the system. The existing FYDP management system covers very few fields like computer science engineering, IT, and few other engineering departments. Science departments hardly benefit out of it. In this draft I have proposed a new pedagogical strategy that will take care of FYDPs of microbiology, biotechnology and some other science departments. The strategy is conceptualised following Learning Collaboratory Framework (LUCIDIFY). Based on the pedagogy I have built a FYDP management system application. I have developed a Model Driven Architecture (MDA) for the purpose of building the application.</p> <p><b>Keywords:</b> LUCIDIFY, FYDP, Pedagogy, Process specification, MDA, Application Development</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. 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Mohammad Saleem Darwaish, and Fang Wang, "Investigation and Prototype Design of Collaborative Virtual Learning Environments," 2012 IEEE/WIC/ACM International Conferences on Web Intelligence and Intelligent Agent Technology</li> <li>19. Mario Barajas, and Martin Owen, "Implementing Virtual Learning Environments: Looking for Holistic Approach," <i>Educational Technology &amp; Society</i> 3(3) 2000 ISSN 1436-4522</li> </ol>	<b>Authors:</b>	<b>Subhradeep Pal, Bharat Gaikwad, Aman Sharma</b>	<b>Paper Title:</b>	<b>FYDP Management System with a Novel Pedagogical Strategy for Study of Science at Bachelor's &amp; Master's Level</b>	175-179
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32.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Sanjay S. Sutar, Pravin R. Kubade, Sunil S. Jamadade</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Fatigue Life Estimation of Pressure Reducing Valve Diaphragm</b></td> </tr> </table> <p><b>Abstract:</b> Predicting the fatigue life of component exactly under the operating conditions is a challenging task in design engineering. In this work, fatigue life of pressure reducing valve diaphragm has been predicted which works under steam pressure. The fatigue life is predicted analytically by Goodman diagram using stress values given by different approaches suggested by M. Di Giovanni, Roark's, Timoshenko and Nadai. The stress and deflection values given by different analytical approaches have shown good agreement with Finite Element Analysis (FEA) results. Finally experimental fatigue testing for fatigue life estimation of the pressure reducing valve diaphragm has been done for its maximum stroke.</p> <p><b>Keywords:</b> Pressure reducing valve, rigid center, endurance limit, fatigue life.</p>	<b>Authors:</b>	<b>Sanjay S. Sutar, Pravin R. Kubade, Sunil S. Jamadade</b>	<b>Paper Title:</b>	<b>Fatigue Life Estimation of Pressure Reducing Valve Diaphragm</b>	180-188
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During inrush current as the lower order harmonics are significant, the average value of instantaneous reactive power becomes negative, and hence this feature is utilized in this paper to distinguish inrush currents from other currents. Investigations are carried out for different faults and switching conditions on a single-phase transformer using PSCAD software. The simulation results show that the proposed method is able to effectively identify inrush currents from other currents.</p> <p><b>Keywords:</b> Inrush current, transformer faults, instantaneous reactive power.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. S.V. Kulkarni and S.A Khaparde, Transfrmer Engineering: Design and Practice. New York: Marcel Dekker, 2004.</li> <li>2. S P Patel "Fundamentals of Transformer Inrush", Proceedings of the 64th IEEE Annual Conference for Protective Relay Engineers, pp 290-300, Oct. 2011.</li> <li>3. 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Hirofumi Akagi, Edson Hirokazu Wattanabe and Mauricio Aredes, "Instantaneous Power Theory and Applications to Power Conditioning", John Wiley and Sons, inc., Publications. 2007.</li> <li>13. Turner R A, Smith K S "Transformer inrush currents", IEEE Industry Applications Magazine, pp 14-19 Sept/Oct 2010.</li> </ol> </td> </tr> </table>	<b>Authors:</b>	<b>D P Balachandran, R Sreerama Kumar, B Jayanand</b>	<b>Paper Title:</b>	<b>Detection of Inrush Current in Transformers Based on Instantaneous Reactive Power</b>	<p><b>Abstract:</b> When a transformer is energized on no load there is a transient inrush current which causes mal-operation of protective relays. The challenge is to distinguish the inrush current from load and fault currents. In this paper, a new technique, based on instantaneous reactive power theory is proposed for the detection of inrush current in single-phase transformers. 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**Authors:** M. Sangeetha, P. Bhuvaneshwari, A. Sujitha, P. Nandhini, C. Gurulakshmi

**Paper Title:** Biological Data Prediction Using Two Mode Grouping Bayesian Principal

**Abstract:** The development of DNA chip technology makes it possible that high-throughput gene expression profiles could be observed simultaneously in particular living organism. The obtained data are usually shown in the form of matrix with genes in rows and experimental conditions in columns. However, these matrices often contain missing values caused by various factors, such as hybridization failures, insufficient resolution, or deposition of dust or scratches on the slide. The subsequent analyses of gene expression data (e.g. clustering, inferring regulatory model, or finding functional gene) always require the complete matrices. Repeating the experiments to obtain a complete gene expression matrix is usually costly and unpractical. Omitting the gene expression profile vector with missing values may lose useful information. Substituting the missing values with zeros or row averages lead the change of variance among variables. So an efficient imputation method for the missing value is needed.

**Keywords:** DNA Chip, Hybridization, Clustering, Genes

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<b>Authors:</b>	<b>Jyotiprakash G. Nayak, L .G. Patil</b>	
<b>Paper Title:</b>	<b>A Comparative Study of Prevalent Water Quality Indices in Streams</b>	
36.	<p><b>Abstract:</b> Indian Rivers like Ganga , Godavari, Brahmaputra, Krishna, Cauvery ,Tungabhadra etc. are getting heavily polluted by untreated sewage of cities,agricultural runoff infected due to excessive dose of insecticides, untreated industrial wastewater etc.(Bhargava,2007). Almost 200 million people in India do not have access to safe and clean drinking water and 90% of the country's water resources are polluted. As per an estimate by C.P.C.B. in 2011, only 29 % of wastewater generated is being treated in urban centres having population more than 50,000 in india and 71% as untreated waste water is being discharged to our rivers, streams and lakes, making them highly polluted. Even some of the our developed cities in India like Pune,Nagpur &amp; Nashik are treating only 70 to 80 % of city sewage (report TOI.April 2013), so the sewage pollution caused by ordinary indian town &amp; village can be imagined. This precipitates the urjent need of identifying the water quality status of our rivers ,to save the human race form water borne diseases &amp; other associated aspects. Water quality status of the river at any place &amp; point of time can be easily ascertained by determining it's Water Quality Index. Some water quality indices have been developed to evaluate water quality in States,Canada &amp; other countries. These indices are based on important water quality parameters like DO,Turbidity,Coliform no. etc..They give the true status of river water quality, usually give the same result, but may have some limitations under specific cases.The present paper does, a comparative evaluation of these prevalentwater quality indices, practiced in different countries.</p> <p><b>Keywords:</b> Fecal Coliform; DO; BOD; WEPWQI ; NSFWQI</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Ahmed Said,David.K. 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