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	<b>Paper Title:</b>	<b>Risk Areas for the Insertion of Infectious Agents The Implementation of Geoprocessing in Epidemiology</b>	
1.	<p><b>Abstract:</b> The current study aimed at determining risk areas for the insertion of infectious agents by means of geoprocessing techniques. The study was conducted in the cities of Paço do Lumiar, Raposa, São José de Ribamar and São Luís, which are part of the Microregion of Urban Agglomeration in the State of Maranhão. In order to determine these risk areas, a geographic database was developed from the collection, storage and processing of data, using alphanumeric data (information from the questionnaire and data obtained from the State protection agency) and geographic data (georeferenced maps obtained from the protection agency and field research data from a GPS device). With this work, it was possible to identify and map risk areas by the determination of 35 points and 181 livestock properties at higher epidemiological risk. The identification, rating and mapping of these areas will help implementing a more efficient epidemiological surveillance system and show the importance of using geoprocessing in epidemiology.</p> <p><b>Keywords:</b> Epidemiological Surveillance, Geotechnologies Infirmities, Maranhão.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>OIE, "Código Sanitário para los Animales Terrestres", 17nd ed. vol.1. Organización Mundial de Sanidad Animal, Paris, 2011, pp. 343.</li> <li>S. S. Lima, "Modelagem estatística para o monitoramento de doenças de notificação compulsória", Dissertação (Mestrado) - Universidade Federal do Pará, Pará, 2008, pp. 70.</li> <li>M.S. Green, Z. Kaufman. (2002, Jul). Surveillance for early detection and monitoring of infectious. <i>Isr. Med. Assoc. J.</i> [Online]. 4(7). pp. 503-506. Available: <a href="http://www.ncbi.nlm.nih.gov/pubmed/12120460">http://www.ncbi.nlm.nih.gov/pubmed/12120460</a>.</li> <li>Brasil, "Manual Técnico. 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2.	<b>Authors:</b>	<b>Anagha Sudhakaran, Manu Prasad</b>	
	<b>Paper Title:</b>	<b>Edge Texture Analysis for Image Retrieval Application with Aid of Robust Object Recognition</b>	
	<p><b>Abstract:</b> It is a new approach in extension with local binary pattern and ternary pattern called DRLBP and DRLTP. By using these methods, the category recognition system will be developed for application to image retrieval. The category recognition is to classify an object into one of several predefined categories. The discriminative robust local binary pattern (DRLBP) and discriminative robust local ternary pattern (DRLTP) are used for different object texture and edge contour feature extraction process. It is robust to illumination and contrast variations as it only considers the signs of the pixel differences. The features retain the contrast information of image patterns. They contain both edge and texture information which is desirable for object recognition. The DRLBP discriminates an object like the object surface texture and the object shape formed by its boundary. The boundary often shows much higher contrast between the object and the background than the surface texture. Differentiating the boundary from the surface texture brings additional discriminatory information because the boundary contains the shape information. These features are useful to distinguish the maximum number of samples accurately and it is matched with already stored image samples for similar category classification. The simulated results will be shown that used DRLBP and DRLTP has better discriminatory power and recognition accuracy compared with prior approaches.</p> <p><b>Keywords:</b> Histograms of equivalent patterns (HEP), Local binary pattern (LBP), Local ternary pattern (LTP), Robust Local binary pattern (RLBP), Robust Local ternary pattern (RLTP)</p> <p><b>References:</b></p>		7-11

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3.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Werda Alam</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>The Chemical Evolution of Mankind: The Challenges of Drug Development</b></td> </tr> </table> <p><b>Abstract:</b> Species' have been evolving for the past 2.7 billion years. In order to do this they have had to adapt to their environment and find a means of survival. Even now this is the case for us, except we humans are at a time where we "evolve" chemically though the usage of drugs.</p> <p><b>Keywords:</b> Species, environment, survival, humans, evolve chemically, drugs.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Structure-Activity Studies of Glucose Transfer: Determination of the Spontaneous Rates of Hydrolysis of Uridine 5'-Diphospho- a -D-glucose (UDPG) and Uridine 5'-Diphospho- a -D-glucuronic acid (UDPGA). C T Bedford, A D Hickman, and C J Logan, Bio-Org. Med. Chem., 11, 2339-2345 (2003)</li> <li>2. McDowall, Jennifer. "Cytochrome P450." Cambridgeshire: 2006. <a href="http://www.ebi.ac.uk/interpro/potm/2006_10/Page1.htm">http://www.ebi.ac.uk/interpro/potm/2006_10/Page1.htm</a>.</li> </ol>	<b>Authors:</b>	<b>Werda Alam</b>	<b>Paper Title:</b>	<b>The Chemical Evolution of Mankind: The Challenges of Drug Development</b>	12-12
<b>Authors:</b>	<b>Werda Alam</b>					
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4.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Hemraj R. Kumavat, Ganesh V. Tapkire</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Application of Remote Sensing in Coastal Region – Case Study</b></td> </tr> </table> <p><b>Abstract:</b> The coastal sea shore line presents serious problems to land use due to flooding, erosion, pollution, and emerging threat posed by rising sea level due to tidal currents. All these require constant monitoring and preventive measure in order to control economy. There are various methods in practice to monitor the coastal processes via, aerial survey, bathymetric mapping, land use and land cover mapping by remote sensing. In this research paper, the changes in the coastal environment and shoreline behavior in Vasai creek are analyzed by using remotely sensed digital data. Visual interpretation of water quality and study the dispersion of polluted water of sea shore line. The land form features changes were quantified by unsupervised classification technique and which will be vital information for coastal planning for development works. The coastal sea shore line of Vasai creek was observed in year of Jan 1999 and Feb 2001 had undergone some significant change in the area of human settlement, salty land and barren land. There was small increase in the area of human settlement; decrease in salty and barren land was observed. The Pollution influx of Mahim creek and Malad creeks were observed. After studied all results the shoreline of Vasai creek was fairly stable.</p> <p><b>Keywords:</b> Remote Sensing DATA, Satellite imagery.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Banner A.V. Al, 1981, "Multi Temporal Analysis of LANDSAT Data for Forest Cut Over Mapping- A Trail Of Two Procedures, Proc. of the Seventh Canadian Symposium on Remote Sensing held in Winnipeg in 1981, pp. 233-240.</li> <li>2. Byrne G.F., Et Al., 1980, Monitoring land cover change by principal component analysis of multi temporal LANDSAT Data, Remote Sensing of Environment, 10 Pp, 175-184.</li> <li>3. Huly Yildirim, 1995, Temporal change detection by principal component analysis on satellite imagery. IEEE, 2/95, pp. 1227-1229.</li> <li>4. Nelson R.F., 1983, Detecting forest canopy change due to insect activity using LANDSAT MSS, Photographic and Remote Sensing, 49, pp. 1303-1314.</li> <li>5. Nayak S.R. et. Al, 1985, Coastal morphology: a case study of Gulf of Khambat, International Journal Of Remote Sensing. Vol 6, pp 559-567.</li> <li>6. Singh A, 1986, Change detection in tropical forest environment of North Eastern India using LADNSAT, In Remote Sensing and Tropical land management, Edited by M. J. Eden &amp; J. T. Parry, (London John Wiley &amp; Sons), Pp. 56, 1995</li> <li>7. IAF, space for education, Health Care &amp; Environment Monitoring, special plenary session, International Astronautically Federation, 46th Congress, Oslo, Norway, Pp. 56, 1995.</li> <li>8. NRSA, Manual of nationwide land use/ land cover mapping using satellite imagery Part1, Pp. 58, 1989.</li> <li>9. L Rao, K.M, Remote sensing for land use planning, International Journal of Remote Sensing, Vol 16, No. 1, 53-60, 1995.</li> <li>10. Change detection of wasteland using remote sensing and GIS, an interim report, CSRE IIT, BOMABAY, 1996.</li> <li>11. Gazetteer of India, Maharashtra State, Thane District, Published by Gazetteer Department, Government Of Maharashtra, Bombay 1982.</li> <li>12. Lillesand T.M. Kiefer R.W. Remote Sensing and Image Interpretation, John Wiley &amp; Sons Inc. Publication, 1986.</li> <li>13. Manual of procedure for wasteland mapping using remote sensing techniques, National Remote Sensing Agency, Department of Space, Government of India, Hyderabad, 1986.</li> <li>14. Chandramohan P, Kumar M. Nayak B.U. And Anand N.M. " Wave atlas for the Indian coast, ocean engineering division, National Institute of Oceanography, Dona Paula, Goa. 1990.</li> <li>15. Vaa Zuidam, R.A., Aerial photo interpretation in terrian analysis and geomorphological mapping, 1995</li> </ol>	<b>Authors:</b>	<b>Hemraj R. Kumavat, Ganesh V. Tapkire</b>	<b>Paper Title:</b>	<b>Application of Remote Sensing in Coastal Region – Case Study</b>	13-16
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	<b>Paper Title:</b>	<b>Effects of Time Laps Affects the Compressive Strength of Cement</b>
6.	<b>Abstract:</b>	<p>In regular Practice delay in Plastering due to various reasons like material availability, labour recess time, or unskilled labour workmanship due to other activity improper plastering sequence. For usually long delay during plastering the mortar should be kept alive by periodically it keep to mortar workable this study gives the strength data simulating such improper plastering sequence to scope this problem related to improper plastering sequence which ultimately result in formation of joints. And joint portion in regular plastering practice no any other treatment or method can used in ordinary construction method. For this study point of view we prepare the cement cube at laboratory in same manner as per the site condition. And conduct test from this result shows the effects of delay in workmanship and joint affects the strength of cement.</p> <p><b>Keywords:</b> Time laps, Mortar Joint, Improper plastering sequence (cement slurry) compressive strength of cement.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Bazid Khan and Bulent Bardan "The effect of sugar on setting time of various type of cement "science vision Vol.89(1) July september 2002 pp 71-78.</li> <li>2. Grant T.Halverson Randall W.Poston "Joint in concrete construction " American Concrete Institute ACI 224.3R,Augest1,1995.</li> <li>3. Bazid Khan and Muhammad Ullah "Effects of retarding Admixture on the setting time of cement pastes in hot water"JKAU Eng Sci.Vol.15 no.1 2004 pp 63-79.</li> <li>4. Amish N.R., Prof. H.S.Vidyadhara, and Prof. C. Sashidhar, "Effect of improper casting sequence on compressive strength", Indian concrete journal, January 2012, pp 30-40.</li> <li>5. N.L. Thomas and J.D. Brichall, "The retarding action of sugars on cement hydration, Cement and concrete research", Vol. 13, 12 April 1983, pp. 830-840.</li> <li>6. Min-Cheol han, Cheon-Goo Han "Use of maturity methods to estimate the setting time of concrete containing super retarding agents" 20 November 2009,Elsevier,pp164-172.</li> <li>7. Alou Elijah Alabama, "Effects of Sugar on Physical Properties of Ordinary Portland Cement Paste and Concrete", Vol AU J.T. 14(3), January 2011, pp 225-228.</li> <li>8. David M. Suchorski and James A. Farny, "Chemical admixtures for concrete"ACI Education Bulletin E4-03, American Concrete Institute, Prepared under the direction and supervision of ACI Committee E-701, 2003, E4-96.</li> <li>9. Amish N.R., Prof. H.S.Vidyadhara, and Prof. C. Sashidhar, "Effect of improper casting sequence on compressive strength", Indian concrete journal, January 2012, pp 30-40</li> </ol>
7.	<b>Authors:</b>	<b>Jaimik Vaghela, Akshay Sharma, Harsh Sharma</b>
	<b>Paper Title:</b>	<b>Generation of Variable Step up DC Voltage Using Marx Generator Circuitry</b>
	<b>Abstract:</b>	<p>The Generation of self-supplied variable step up DC voltage proposed is originates from conventional Marx generators. This recently developed Marx generator circuit employs high voltage (HV) Metal Oxide Semiconductor Field Effect Transistor (MOSFET) as switches and series connected diodes as isolated components. Optic coupler are use to isolate and protect the damaging of low voltage deices from HV circuit. Project Results of 10 stages having pulses of 12v, 10ms and 50Hz are accustomed in project. The switching of MOSFET will be done and controlled by matrix keyboard and programmed microcontroller such that, we can get variable step up DC voltage. This topology of the circuit generates pulses with fast rise time and allows easy variable step-up output voltage. In addition, as there is use of microcontroller the circuit is capable to adjust positive or negative pulse Width, dead-time between two pulses.</p> <p><b>Keywords:</b> MOSFET, microcontroller, step up DC voltage, self-supplied, Marx generator, solid-state devices, High voltage pulses.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Yifan Wu, Kefu Liu, Jian Qiu, XiaoXu Liu and Houxiu Xiao "Repetitive and High Voltage Marx Generator Using solid-state Devices" IEEE Transactions on Dielectrics and Electrical Insulation Vol. 14, No. 4; August (2007).</li> <li>2. M S Naidu and V Kamaraju "High Voltage Engineering" Tata McGraw-Hill Publishing Company Limited (1995).</li> <li>3. Allan R. Hambley "Electrical Engineering- Principle and Application" Pearson Education, Inc. (1997).</li> <li>4. P.S Bimbhra "Power Electronic" Khanna Publishers ISBN – 8174092153.</li> </ol>
	<b>Authors:</b>	<b>S. K. Abdul Siddique, K. Vijaya Kumar Reddy</b>
	<b>Paper Title:</b>	<b>Theoretical Investigation on Combustion Chamber Geometry of DI Diesel Engine to Improve the Performance by Using Diesel-RK</b>
	<b>Abstract:</b>	<p>Diesel engines are prime sources to generate power in transportation industrial sectors. Limited petroleum reserves and stringent environmental norms are the two parameters to influence the diesel engine usage in this field. In diesel engines, fuel is injected into the combustion chamber and mixed with the compressed air. Proper mixing of fuel and air is important to produce controlled burn rate. Combustion chamber geometry is the key element in air fuel mixing process. In the present research paper, an attempt is made to simulate the critical combustion and put efforts to optimize the combustion chamber geometry. Diesel –RK is one of the computational fluid dynamics software specifically developed for internal combustion engine simulations. In the present study, single cylinder, four stroke direct ignition diesel engine and Diesel-RK software are considered for investigation.</p> <p><b>Keywords:</b> DI Diesel engine, combustion chamber, Diesel-RK, Simulation</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Umakant V.Kongre, Vivek K.Sunnapwar, 2010, "CFD modelling and Experimental Validation of Combustion in Direct Ignition Engine with Diesel" International journal of applied engineering, Dindigul, Volume 1, No 3, pp 508-517.</li> <li>2. F.Payri, J.Benajes, X.Margot,A.Gil, "CFD modeling of the in-cylinder flow in direct-injection Diesel engines" computers &amp; Fluids 33 (2004) 995-1021</li> <li>3. Mohamed F. Al-Dawody, "effect of soybean oil biofuel Blending on the performance And emissions of diesel engine using diesel-rk</li> </ol>

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8.	<p><b>Authors:</b> Shankar B, Chidambara Swamy</p> <p><b>Paper Title:</b> Listing and Grading of Heritage Buildings in Mysore City</p>	<p><b>Abstract:</b> Cultural heritage is a legacy of physical artefacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations. Physical or "tangible cultural heritage" includes buildings and historic places, monuments, artefacts, etc., that are considered worthy of preservation for the future. Mysore is one of the important cultural heritage cities in India. It has many built heritage structures to include monuments, heritage buildings, and heritage areas. A very few buildings have been identified by the State Archaeology Department and Mysore Urban Development Authority. The majority of the unlisted buildings are undergoing a tremendous pressure for demolition, structural transformation and decay due to absence of clear cut guidelines from the planning authority. Therefore, there is a need for identifying for protection, conservation and regulating them. The paper presents the framework for listing and grading of heritage buildings in for effective protection, conservation and management the City of Mysore.</p> <p><b>Keywords:</b> Heritage Buildings, Listing, Grading, culture</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Chidambara Swamy and Dr. B. Shankar, Conservation Strategies for Heritage City: Mysore, Vol.3, No.5, International Journal on Recent Trends in Engineering and Technology (IJRTET), May 2010.</li> <li>Chidambara Swamy and B. Shankar, “Policy Measures for Improving the Imageability in the City of Mysore”, International Journal of Modern Engineering Research, Vol.2, Issue.2, Mar-Apr 2012 pp-134-138.</li> <li>Chidambara Swamy and B. Shankar, “Heritage Resources and Architecture Styles : Mysore City”, International Journal of Modern Engineering Research, Vol.2, Issue.2, Mar-Apr 2012 pp-139-143.</li> <li>Government of India, Heritage Tool Kit for Preparation of City Development Plan under JNNURM, Ministry of Urban Development, New Delhi, November 2006.</li> <li>Lynch Kevin (1991), The Image of the City, Mc Graw-Hill, New York.</li> <li>Karnataka Town and Country Planning Act. 1961. Department of Town Planning. Govt. of Karnataka, 2006.</li> <li>Report on JNNURM by STUP Consultants Pvt. Ltd. for Department of Tourism, Karnataka on Heritage and Urban renewal of Heritage core under J.N.NURM Scheme detailed</li> <li>Shankar B and Chidambara Swamy, “Creating Awareness for Heritage Conservation in the City of Mysore: Issues and Policies”, International Journal of Modern Engineering Research www.ijmer.com Vol.3, Issue.2, March-April. 2013 pp-698-703</li> <li>Shankar B and Shashikumar M.C, “Strategies for Reinvigorating the Urban Heart of Mysore” International Journal of Modern Engineering Research (IJMER), www.ijmer.com Vol.3, Issue.2, March-April. 2013 pp-692-697</li> </ol>
9.	<p><b>Authors:</b> VA Kulkarni, B.B. Ahuja</p> <p><b>Paper Title:</b> Statistical Performance Analysis of Zirconia-Dolerite Ball Plate for Dimensional Stability</p>	<p><b>Abstract:</b> A novel artifact zirconia-dolerite ball plate is developed for interim check of coordinate measuring machine. Artifact contains 52 balls and distances between balls are used for analysis of measuring volume of CMM. Statistical performance analysis is explained in this paper. Stability of Ball plate is explored through cross correlation. The resultant corroleogram depicts that the ball plate can be used for 11 months without recalibration or rechecking for dimensional stability.</p> <p><b>Keywords:</b> Artifact, Ball Plate, Run Test, Cross Correlation</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>D. Acosta, J. Velazquez, J.A. Albajez, J.A. Yague, M.A. Lope, Machine Tool Verification according to machine configuration, The Manufacturing Engineering Society International Conference, MESIC 2013, Procedia Engineering 63 (2013) 700-709</li> <li>P. Ramu, J.A. Yague, R.J. Hocken, J. Miller, Development of Parametric Model and Virtual Machine to estimate task specific measurement uncertainty for a five-axis multi-sensor coordinate measuring machine, Precision Engineering 35 (2011), 431-439</li> <li>Soichi Ibaraki, Takafumi Hata, A new formulation of laser step diagonal measurement-Three-dimension case, Precision Engineering 34(2010), 516-525</li> <li>Ryoshu Furutani, Ken Shimojima, Kiyoshi Takamasu, Kinematical Calibration of Articulated CMM using Multiple Simple Artefacts, XVII IMEKO World Congress Metrology in the 3rd Millenium, June 22-27, 2003, Dubrovnik, Croatia</li> <li>Pawel J Swornowski, A critical look at the coordinate measuring technique, Mechatronics 23(2013), 80-93</li> <li>Diego Rodriguez-Ibanez, Jose Alonso, Juan Antonio Quiroga, Squareness error calibration of a CMM for quality control of ophthalmic lenses, The International Journal of Advanced Manufacturing Technology 68 (2013), 487-493</li> <li>K Bala Murugan, Manish Kumar, B Ashok, B Hari Prasad and Arjun Vedadri, Uncertainty Budget Evaluation of High Precision Length Measuring Equipment, Manufacturing Technology Today (2012), 26-30</li> <li>PK Sharma, LS Gourani and V Sreeraj, Calibration of Measuring Equipment and Machines, Manufacturing Technology Today (2012), 19-26</li> <li>SN Ravi Kumar, Sachin Pawar, Effect of Environmental Conditions on Measurement Accuracy Using Shop-Floor CMM’s, Manufacturing Technology Today (2012), 13-18</li> <li>BS Kumar, SR Vijaykumar, Measurement Capability Assurance Through Identification and Compensation of Hidden Error, Manufacturing Technology Today (2012), 27-30</li> <li>Francesco Aggogeri, Giulio Barbato, Emanuele Modesto Barini, Gianfranco Genta, Measurement uncertainty assessment of Coordinate Measuring Machines by Simulation and Planned Experimentation, CIRP Journal of Manufacturing Science and Technology 4(2011), 51-56</li> <li>P. Ramu, J.A. Yague, R.J. Hocken, J. Miller, Development of Parametric Model and Virtual Machine to estimate task specific measurement uncertainty for a five-axis multi-sensor coordinate measuring machine, Precision Engineering 35 (2011), 431-439</li> </ol>

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<b>Paper Title:</b>	<b>Energy Efficiency of Banana (<i>Musa sp.</i>) Crop under Different Irrigation Methods</b>													
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	<p>period in DMI against CMI. The banana yields in DMI were (72.6 and 67.4 t/ha) higher against CMI (59.1 and 52.5 t/ha) under experimental and farmer's fields, respectively. In DMI about 32.70 and 29.99 per cent input energy savings and 19.73 and 14.09 per cent increase in output energy were noticed against CMI. Also, the higher energy efficiency of 13.5 and 12 was noticed in DMI as compared to CMI (7.6 and 7.4). In both the fields, 17.01 and 20.36 per cent higher BC ratios were recorded in DMI (2.27 and 2.01) over CMI (1.94 and 1.67). In both the fields, additional benefit of 2,125 and 1,870 Rs./ha could be obtained by getting more carbon credits due to use of drip irrigation. The potential of carbon credits then projected over 5,000 ha area under banana crop in Jalgaon district. The present study reveals that drip irrigation has a definite role in minimizing the energy use in terms of water and electricity as well as reducing the impacts of climate change in Indian agriculture.</p> <p><b>Keywords:</b> Drip irrigation, energy consumption, CO2 emission and carbon credits.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. R. K. Sivanappan, "To overcome the demand for water." Kisan World. 2005, 32(8), p: 47.</li> <li>2. S. V. Westarp, S. Chieng, and H.Schreier, "A comparison between low-cost drip irrigation, conventional drip irrigation, and hand watering in Nepal." Agric. Water Mgmt., 2004, 64, p: 143-160.</li> <li>3. S. S. Magar, N. N. Firke and J. R. Kadam, "Importance of drip irrigation." Sinchan, 1988, 7(2), p: 61-62.</li> <li>4. Narayanamoorthy, "Micro-irrigation and electricity consumption linkages in Indian agriculture: a field based study." Int. Conf. linkages between Energy and Water Management for Agriculture in Developing Countries, Hyderabad, India, 29-30 Jan. 2007.</li> <li>5. Rekha Krishnan, "India's energy security: imperatives for change." Energy Sec. Insights, 2009, 4(4), p: 2.</li> <li>6. BERI, "Biomass Energy for Rural India", 2007, Available: <a href="http://nitpu3.kar.nic.in/bioenergyindia">http://nitpu3.kar.nic.in/bioenergyindia</a>.</li> <li>7. S. Singh and V. K. Mittal, "Energy requirement for cultivation of major crops of Punjab. Proc. Energy Agric. Indian Soc. Agric. Engg., 1989, pp: 90-94.</li> <li>8. CEA, "All India Electricity Statistics-general review". Central Electricity Authority, Government of India, New Delhi. 2008.</li> <li>9. Gold Standards, Version 2, "Premium quality carbon credits", 2009, Available: <a href="http://abwww.cdmgoldstandard.org/gsv2_toolkit.pdf">abwww.cdmgoldstandard.org/gsv2_toolkit.pdf</a>.</li> <li>10. K. Saini, K. P. Sharma, K. P. Pant, and D. R. Thakur, "Energy management for sustainability of hill agriculture: A case of Himachal Pradesh." Indian J. Agric. Econ., 1998, 53(3), p: 223-239.</li> <li>11. S. Shahin, A. Jafari, H. Mobli, S. Rafiee, and M. Karimi, "Effect of farm size on energy ratio for wheat production: A case study from Ardabil Province of Iran." American-Eurasian J. Agric. and Environ. Sci., 2008, 3(4): 604-608.</li> </ol>					
12.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Authors:</b></td> <td><b>S. Thulasi Prasad, S. Varadarajan</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Assessment of Heart Rate Variability using Independent Component Analysis</b></td> </tr> </table> <p><b>Abstract:</b> According World Health Organisation reports, it is understood that cardiovascular diseases are increasing at an alarming rate and becoming main cause for more deaths. The early detection of cardiac related deceases is essential to save a patient from death. The ECG signal plays a key role in the early detection and diagnosis. In recent years there have been wide-ranging studies on Heart rate variability in ECG signals and Digital Signal Processing is becoming as an essential and effective pedagogical approach to solve a problem of detecting selected arrhythmia conditions from a patient's electrocardiograph (ECG) signals. Normally the Heart rate variability is studied based on RR interval and used analyse the sympathetic-parasympathetic autonomic stability, the risk of unpredicted cardiac death. Even there are several methods to analyse the ECG signal, the Blind Source Separation (BSS) approach is very useful and successful in extracting a cleaned ECG signal from a ECG which is mutilated badly by noise. The BSS approach, it is intended to estimate a set of underlying source signals of physiological activity from the sole observation of unknown mixtures of the sources. In this paper, first we addressed Independent Component Analysis (ICA) to remove noise and artifacts from ECGs. In the second step the noise free ECG signal is reconstructed from desired Independent Components. Finally QRS complexes, R peaks, RR intervals, and HR were found using suitable algorithms and performed a statistical analysis to finding HR Variability (HRV). This method is tested on ECG signals from in MIT-BIH Arrhythmia database.</p> <p><b>Keywords:</b> Arrhythmia, AV node, ECG, HRV, ICA, MATLAB, QRS, RR interval, SA node.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. N. Goldschlager, "Principles of Clinical electrocardiography", 13th edition, ISBN 978-083-8579-510, Connecticut, USA.</li> <li>2. J.R. Hampton, "The ECG Made Easy", International Edition (English), 8th Edition, Elsevier Health Sciences, 2013.</li> <li>3. Nait-Ali and C. Cavaro-Menard, "Compression of biomedical images and signals", ISTE-WILEY, 2008.</li> <li>4. Phlypo R, Zarzoso V, Lemahieu I, "Exploiting independence measures in dual spaces with application to atrial f-wave extraction in the ECG". In: Proc. MEDSIP-2008, 4th International Conference on Advances in Medical, Signal and Information Processing, Santa Margherita Ligure, Italy, 2008</li> <li>5. Zarzoso V, Comon P, "Robust independent component analysis for blind source separation and extraction with application in electrocardiography", In: Proc. EMBC-2008, 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Vancouver, BC, Canada, 3344-3347, 2008.</li> <li>6. Zarzoso V, Nandi A.K, "Noninvasive fetal electrocardiogram extraction: blind separation versus adaptive noise cancellation", IEEE Transactions on Biomedical Engineering 48(1):12-18, 2001.</li> <li>7. Huy Nguyen and Rong Zheng, "Binary Independent Component Analysis With or Mixtures", IEEE Transactions on Signal Processing, Vol. 59, Issue 7, July 2011, pp. 3168-3181.</li> <li>8. J. Parák, and J. Havlík, "ECG Signal Processing and Heart Rate Frequency Detection Methods", In Proceedings of Technical Computing Prague, 2011.</li> <li>9. M. Jannett T.C. Jadallah M.A., Yates S.L. Quint S.R. Troynagle H. "A comparison of the noise sensitivity of nine QRS detection algorithms", IEEE Trans. Biomed. Eng. 37:85-98, 1990.</li> <li>10. P. S. Hamilton, W. J. Tompkins, "Quantitative Investigation of QRS Detection Rules Using MIT/BIH Arrhythmia Database", IEEE Transactions on Biomedical Engineering, Vol.31, No.3, March 2007, pp. 1157-1165, ISSN 0018-9294.</li> <li>11. J. Pan, and W. J. Tompkins, "A Real-Time QRS Detection Algorithm", IEEE Transactions on Biomedical Engineering, 32(3): 230-2, 1985.</li> <li>12. Aapo Hyvärinen, Erkki Oja, "Helsinki Independent Component Analysis", University of Technology Laboratory of Computer and Information Science, Available: <a href="http://www.cis.legacy.ics.tkk.fi/aapo/papers/IJCNN99_tutorialweb/IJCNN99_tutorial3.html">http://www.cis.legacy.ics.tkk.fi/aapo/papers/IJCNN99_tutorialweb/IJCNN99_tutorial3.html</a></li> </ol>	<b>Authors:</b>	<b>S. Thulasi Prasad, S. Varadarajan</b>	<b>Paper Title:</b>	<b>Assessment of Heart Rate Variability using Independent Component Analysis</b>	48-52
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13.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Authors:</b></td> <td><b>P. Thangaraj, P. Balasubramanie</b></td> </tr> </table>	<b>Authors:</b>	<b>P. Thangaraj, P. Balasubramanie</b>			
<b>Authors:</b>	<b>P. Thangaraj, P. Balasubramanie</b>					

	<b>Paper Title:</b>	<b>A Survey on QoS Based Service Composition for Service Oriented Architecture</b>
14.	<b>Abstract:</b>	<p>Due to the tremendous growth in web services, Service Composition is a challenging problem due to the availability of composite services. Service selection is also a major factor that is to be considered during the retrieval of the service. These are influenced by functional and non functional parameters. The functional parameters include the integrity, behavior, fault tolerant service, etc. The non functional parameters include the efficiency, execution cost, time; availability; reputation and reliability are termed as QoS attributes. The various algorithms for composition include the heuristics and non heuristics. The problem formulated has to produce an optimized service composition and to select the efficient service that integrates and satisfies the needs of the end user.</p> <p><b>Keywords:</b> web Service; Quality of Service; functional parameters; non functional parameters; algorithm; Service Composition</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Mardukhi, F., NematBakhsh, N., Zamanifar, K., Barati A.: QoS decomposition for service composition using genetic algorithm. In: Applied Soft Computing, Volume 13, Issue 7, pp. 3409--3421.</li> <li>Wei Z., Junhao W., Min G., Junwei L.: A QoS preference-based algorithm for service composition in service-oriented network. In: Optik - International Journal for Light and Electron Optics, Vol. 124, Issue 20, pp. 4439--4444.</li> <li>Curbera F., Duftler M., Khalaf R., Nagy W., Mukhi N., Weerawarana S.. "Unraveling the Web services web: an introduction to SOAP, WSDL, and UDDI," Internet Computing, IEEE, Vol. 6, pp. 86-93, 2002</li> <li>Küster, U., H. Lausen, and B. König-Ries, Evaluation of Semantic Service Discovery—A Survey and Directions for Future Research. Emerging Web Services Technology, 2008. 2: p. 41-58.</li> <li>Keyvan M., Suhaimi I., Mojtaba K., Kanmani M., Sayed G. H. T.i, A comparative evaluation of semantic web service discovery approaches, Proceedings of the iiWAS2010, November 08-10, 2010, Paris, France.</li> <li>Klusck, M., Semantic Web Service Coordination, in CASCOM: Intelligent Service Coordination in the Semantic Web. 2008. p.59-104.</li> <li>Klusck, M., B. Fries, and K. Sycara, OWLS-MX: A hybrid Semantic Web service matchmaker for OWL-S services. Web Semantics: Science, Services and Agents on the World Wide Web, 2009. 7(2): p. 121-133</li> <li>Kourtesis, D. and I. Paraskakis, Combining SAWSDL, OWLSDL and UDDI for Semantically Enhanced Web Service Discovery, in The Semantic Web: Research and Applications. 2008. p. 614-628</li> <li>Klusck, M., P. Kapahnke, and I. Zinnikus, SAWSDL-MX2: A Machine-learning Approach for Integrating Semantic Web Service Matchmaking Variants, in IEEE International Conference on Web Services. 2009.</li> <li>Duy Ngan Le ; Goh, A.E.S. FuzMOD: A Fuzzy Multi-ontology Web Service Discovery System. APSCC, The 2nd IEEE. 2007, pp. 197-203</li> <li>Srinivasan, N., M. Paolucci, and K. Sycara. Semantic Web Service Discovery in the OWL-S IDE. in System Sciences. Proceedings of HICSS '06, 2006</li> <li>Somasundaram, T.S., et al. Semantic Description and Discovery of Grid Services using WSDL-S and QoS based matchmaking Algorithm. in ADCOM 2006</li> <li>Li, H., X. Du, and X. Tian, A WSMO-Based Semantic Web Services Discovery Framework in Heterogeneous Ontologies iiWAS2010 Proceedings Web Services Environment. Lecture Notes In Computer Science, 2007. 4798: p. 617.</li> <li>Pukhkaiev, D., Kot, T., Globa, L., Schill, A.: A novel SLA-aware approach for web service composition. In: IEEE EUROCON, pp. 327--334 (2013)</li> <li>Berbnr, R., Spahn, M., Repp, N., eckmann, O., Steinmetz, R.:Heuristics for QoS-aware Web Service Composition. In: Proceedings of the IEEE International Conference on Web Services 2006, pp. 72--82. IEEE Computer Society Washington, DC(2006)</li> <li>Aiello, M., el Khoury, E., Lazovik, A., Ratelband, P.: Optimal QoS-Aware Web Service Composition. In: IEEE Conference on Commerce and Enterprise Computing, pp. 491—494 (2009)</li> <li>Kot T., Reverchuk A., Globa L., Schill A.: A Novel approach to increase efficiency of OSS/BSS workflow planning and design. In: Proceedings of BIS'12, vol.117, pp.142-15.</li> </ol>
	<b>Authors:</b>	<b>Amal El-Berry, Afrah Al-Bossly</b>
	<b>Paper Title:</b>	<b>Effect of Heat on Computer's Processor Failures</b>
	<b>Abstract:</b>	<p>This paper presents the effect of heat on computer's processor speed. There were two types of temperature variation that affect system performance: global temperature variations and local temperature variations. The disparity in power dissipation between active units and inactive units could result in severe hot spots on a chip, creating large temperature variations which could reduce functionality or caused timing failure. The goal of the analysis to understand the failure rate behavior of a particular item, Weibull++ standard folio had been used to perform life data analysis. Degradation analysis was useful for tests performed on highly reliable products. This analysis consists of two steps: first, the failure times of the units on test were extrapolated using measurements of their degradation overtime and second, once these failure times were obtained, life data analysis is used to estimate the reliability of the product. Degradation was used to analyze the measurements of a computer processor decreasing performance. Then the failure time plot to compare the failure times that are expected from a design with a specified reliability to the actual failure times that are observed during a test. Data obtained from field failures could provide valuable information about how a product actually performs in the real world. The results indicated that the system will fail if any of the modes occurred and failure rate behavior for each failure mode was known and could be described with a life distribution and parameters. In life data analysis, it was assumed that the components being analyzed were non-repairable; that was. They were either discarded or replaced upon failure. However, for complex systems such as computers will be repaired (not discarded) upon failure. Failures were recurring events in the life of a repairable system, and data from such a system are known as recurrent event data. Weibull++ includes a choice of two methods for analyzing recurrent event data: parametric and non-parametric analysis. Event logs, or maintenance logs, capture information about a piece of equipment's failures and repairs, such as the date/time the equipment failed and the date/time the equipment was restored. This information was useful for helping companies achieve productivity goals by giving insight about the failure modes, frequency of outages, repair duration, uptime/downtime and availability of the equipment.</p> <p><b>Keywords:</b> Reliability, maintenance, failures, Weibull++, thermal and lifetime.</p>

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**Authors:** Vasileios C. Drosos, Anastasia Stergiadou, Vasileios J. Giannoulas, George Doukas

**Paper Title:** Diachronic Land Uses Changes in Semi Mountainous Areas Next to Urban and Tourist Areas

**Abstract:** Land cover data documents how much of a region is covered by forests, wetlands, impervious surfaces, agriculture, and other land and water types. Water types include wetlands or open water. Land use shows how people use the landscape – whether for development, conservation, or mixed uses. The relationship between the land ownership status and the rate of coverage by trees or shrubs do the unconscious people to put fires. The timeless control of changes and land use maps prevent fires aimed at creating plots. In the context of this research, land cover maps of previous years and recent ones were compared, with the help of aerial photographs and analytical and digital photogrammetric stations in representative regions of Greece. Generally we observe that where intense coastal tourist traffic (Toroni) is existed, the forest land is reduced in order to increase housing, while where there is not exist tourist traffic (all the other research areas such as Sarakina, Petrokerasa, Panorama and Pelion), the forest land is increased everywhere with parallel abandonment of agricultural land.

**Keywords:** Forestry, land cover, land use, photogrammetry.

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