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Website: www.blueeyesintelligence.org

Email: director@blueeyesintelligence.org, blueeyes@gmail.com

Cell #: +91-9669981618, WhatsApp #: +91-9669981618, Viber #: +91-9669981618

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| 1. | Authors: | Nancy Merin Thomas | | |
| | Paper Title: | Design of Snubber Circuit for Thyristors Using Pspice | | |
| | <p>Abstract: In normal cases switching a power electronic devices causes a sudden abrupt transients across the device which is undesirable for its perfect operation. So snubber circuits are necessary to maintain the safe function and long life of power switches. These circuits provide better efficiency and increase the possible switching speed and reduce the EMI. This paper deals with the designing of RC snubber circuit for thyristors. RC snubber circuits are normally connected across a switching device to limit the rate of rise of voltage (dv/dt). To analyse the performance of the circuit inductive load switching is simulated. Simulations are done in Pspice.</p> <p>Keywords: EMI, Inductive load switching, snubber circuit.</p> <p>References:</p> <ol style="list-style-type: none"> 1. G. N. Revankar and P. K. Srivastava, "Turn OFF model of an SCR,"IEEE Trans. Ind. Elec. Contr. Instr-.. vol. IECI-22, pp. 507-510, Nov.1975. 2. C. W. Lee and S. B. Park. "An optimum parameter determination for The SCR turnoff model, "" IEEE International Symposium on Circuits and Systems, pp. 1018-1021, May 1987. 3. J. B. Rice, "Design of snubber circuits for thyristor converters", IEEE Conf Rec. of Fourth Annual Meeting of Industry and General Applications Group, pp. 485-489, 1969. 4. W. McMurray, "Optimum snubbers for power semiconductors." IEEE Trans. Ind. Appl. vol. IA-8, pp. 593-600. Sept. /Oct. 1972. 5. International Rectifier Data Sheets, International Rectifier. 1984. 6. S. Williamson, R. G. Cam, and B. W. Williams, "Calculation ofPower losses in thyristor converters", IEEE Trans.Ind.Electr. vol.IE-31, pp. 192-200, May 1984. 7. M. G. Kang, "An effect of saturable reactor-resistor pair on high power hard commutation chopper", M.S. Thesis. Korea Adv. Inst. of Science And Tech., 1986. 8. Dr. P.S. Bimbra, "Power Electronics"-Fourth Edition | | 1-4 | |
| 2. | Authors: | R. Amutha, E. Chandrasekaran | | |
| | Paper Title: | An EOQ Model for Deteriorating Items with Quadratic Demand and Time Dependent Holding Cost | | |
| | <p>Abstract: This paper presents an inventory model for deteriorating items with Quadratic demand. An Exponential distribution is used to represent the distribution of time to deterioration. Shortages are not allowed and holding cost is time dependent. Our objective is to minimize the total cost. Numerical Examples is given to illustrate the solution procedure.</p> <p>Keywords: Deterioration, Demand, holding cost, Inventory, Quadratic Demand, Shortages.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Li-Qun ji, "Application of Mathematica in Economic order Quantity Model with Weibull Deterioration Distribution, time – Varying demand and shortages, 2010", IEEE. 2. P.K Tripathy., S.Pradhan, "An Integrated partial Backlogging Inventory Model having Weibull Demand and variable Deterioration rate with the Effect of trade credit", IJSER, Vol-2, Issue 4, April 2011 ISSN 2229-5518. 3. Hardik Soni, Nita H.Shah and Chandra K Jaggi, "Control and cybernetics, Inventory models and trade credit": a review Vol 39 (2010) N0.3 4. Manoj Kumar Meher, Gobinda Chandra Panda and Sudhir Kumar Sahu, "An Inventory model with Weibull Deterioration rate under the delay in payment in Demand Decaling market", Applied Mathematical Sciences, Vol6 2012, No-23, 1121-1133. 5. Chaitanya Kumar Tripathy and Umakanta Mishra, "Ordering policy for weibull Deteriorating Items for Quadratic Demand with permissible Delay in payments". Applied Mathematical Science, Vol.4, 2010 No.44, 2181-2191. 6. R.P Tripathi, S S Misra and H.S.Shika, "A Cash flow oriented EOQ model under permissible delay in payments", International Journal of Engineering Science and Technology, vol.2, Nov 11, 2010, pp.123-131. 7. Anil Kumar Sharma, ManojKumar Sharma and Nisha Ramani, "An inventory model with Weibull distribution Deteriorating Item power pattern demand with shortage and time Dependent Holding cost", American Journal of Applied Mathematics and Mathematical Sciences (Open Access Journal), Vol. 1 Number 1-2, January-December 2012, pp.17-22. 8. R.Begum,S.K.Sahu and R.R.Sahoo," An EOQ model for deteriorating Items with Weibull Distribution Deterioration, Unit production cost with Quadratic demand and Shortages", Applied Mathematical Science Sciences, Vol.4, 2010,n0.6, 271-288. 9. Xianhao XU, Ziyi TANG, "An Inventory model for Intangible Deteriorated items with Demand dependent deteriorating rate", 2008, IEEE. 10. Nita H. Shah and Kunal T.Shukla, "Deteriorating Inventory model for waiting time partial Backlogging", Applied Mathematical Sciences, Vol 3, 2009 No.9, 421-428. 11. Garima Garg, Bindu Vaish and Shalini Gupta, "An Economic production lot size model with price discounting for Non-Instantaneous Deteriorating Items with Ramp-Type production and DemandRates", Contemp.Math.Sciences, Vol.7,2012, no.11,531-554. 12. C.K.Tripathy and L.M.Pradhan, "An EOQ model for weibull Deteriorating Items with power Demand and Partial Backlogging", Int.J.Contemp. Math.Sciences, Vol 5, 2010, no.38, 1895.1904. 13. Rixian Li, Hongjie Lan, John R.Mawhinney, "A Review on deteriorating inventory study", J Service Science & Mngement, 2010, 3:117-129. 14. Md.Azizul Baten and Anton Abdulbasah Kamil, "Inventory Management Systems with Hazardous Items of Two-Parameter Exponential Distribution". | | 5-6 | |
| Authors: | Yogesh N. Thakre, Shubhada S. Thakare, Devendra S. Chaudhari | | | |
| Paper Title: | A Review of Memory Circuit Design Trend in Nanotechnology | | | |
| <p>Abstract: DRAM is type of volatile memory. Nowadays semiconductor memory is capable to store large data in small area. In past SRAM is more preferable as compared to DRAM because of its high speed operation, large noise margin and logic compatibility. However, due to its large cell area and high power consumption, SRAM has</p> | | | | |

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| 3. | <p>limitations when expanding the array size beyond a certain level in process variation. This paper reviews the history of RAM from SRAM to DRAM. It also suggests the day by day DRAM is more preferable as compare to SRAM because of cell area decreases as number of transistor decreases from SRAM to DRAM design.</p> <p>Keywords: Cell, Cell area, Dynamic RAM (DRAM), Static RAM (SRAM), 3T-1D (Three transistor-one diode), etc.</p> <p>References:</p> <ol style="list-style-type: none"> 1. X. Liang, R. Canal, G. Wei, and D. Brooks “Replacing 6T SRAMs with 3T1D DRAMs in the L1 data cache to combat process variability”, IEEE Computer Society, Vol.8, No.1:pp.60-68, January-February 2008. 2. B. Raj, A. Suman & G. Singh “Analysis of Power Dissipation in DRAM Cells Design for Nanoscale Memories” International Journal of Information Technology and Knowledge Management, Vol. 2, No. 2, pp. 371-374 July-December 2009. 3. M. Tien Chang, P. Tsang Huang and W. Hwang “A 65nm Low Power 2T1D Embedded DRAM with Leakage Current Reduction” in 39th IEEE National Science Council and Ministry of Economic Affairs International Symposium on Micro architecture, Vol.1, No.12, pp.56-62, July-December 2006. 4. S. Lin, Y. Kim and F. Lombardi “A 32nm SRAM Design for Low Power and High Stability” IEEE Journal of in Solid-State Circuits, Vo. 42, No. 3, pp. 680-688, January-March 2007. 5. B. Amelifard, F. Fallah “Leakage Minimization of SRAM Cells in a Dual-Vt and Dual-Tox Technology” IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 16, No. 7, Jun-July 2008. 6. N. Bhat “Design and Modeling of Different SRAM’s Based on CNTFET 32nm Technology” International Journal of VLSI design & Communication Systems, Vol.3, No.1, November-February 2012. 7. N. Bhat “Design and Modeling of Different SRAM’s Based on CNTFET 32nm Technology” International Journal of VLSI design & Communication Systems, Vol.3, No.1, November-February 2012. 8. B. Davis “Modern DRAM Architectures” In Proc. 26th Annual International Symposium on Computer Architecture, Vol.2, No. 26, pp. 222–233, July-December 1999. 9. X. Liang, R. Canal G. Wei and D. Brooks “Process Variation Tolerant 3T1D-Based Cache Architectures” School of Engineering and Applied Sciences, Harvard University, Cambridge, vol. 36, no. 4, pp. 658–665, 2001. 10. S. M. Kang & Y. Leblebici “CMOS Digital Integrated Circuits Analysis and Design” 3rd edition TATA McGraw Hill Edition, pp.405-474 | 7-10 | | | | |
| 4. | <table border="1"> <tr> <td>Authors:</td> <td>Gajendra Sanjay Vyas, Vivek S. Deshpande</td> </tr> <tr> <td>Paper Title:</td> <td>Effect of Multiple Sinks on the Performance of Wireless Sensor Networks</td> </tr> </table> <p>Abstract: Wireless Sensor Network is a collection of sensor nodes. These nodes are to able sense the surrounding environment and based on changes in environment sends data to destination which is called as Sink in sensor networks. When any event occur each sensor node try to disseminate data to sink. Due this congestion becomes the primary problem of network which must be solved, the retransmission of data packet also increased. Due to congestion the other quality of service parameters (like reliability, throughput) gets decreased. There are two techniques by which congestion can be reduced which are: either by reducing the data sending rate of source or by providing extra resources. Reducing data sending rate will decreases the network throughput. In this paper we proposed the multiple sink mechanism in which sensor nodes are able to deliver data to multiple sink in the network. Simulation result shows that proposed congestion control mechanism improve the packet delivery ratio, reliability, throughput of the network and also reduces the packet loss ratio which reduces the number of retransmission, saves the energy of sensor node . This will improve the network lifetime. It will also able to handle the “Black Hole Problem” in the wireless sensor network.</p> <p>Keywords: Congestion Control, Wireless Sensor Network, Packet Delivery Ratio, Multiple Sink, and Reliability.</p> <p>References:</p> <ol style="list-style-type: none"> 1. I. F. Akyildiz, W. Su, Y. Sankarasubramanian and E. Cayirci, “Wireless sensor networks: a survey”, Elsevier Computer Network, Volume. 38, Issue. 4, pp 393-422, 2002. 2. Fei Hu, Yang Xiao and Qi Hao, “Congestion-Aware, Loss-Resilient Bio Monitoring Sensor Networking for Mobile Health Application”, IEE Journal on Selected Area in Communication, Volume. 27, Issue. 4, pp 450-465, 2009. 3. Meenakshi Sharma, Ramanjyot Kaur, “An Approach to Design habitat Monitoring System using Sensor Networks”, International Journal of Soft Computing and Engineering, Volume. 1, Issue. NACJ2011, pp 5-8, 2011. 4. Li Qiang Tao and Feng Qi Yu, “ECODA: Enhanced Congestion Detection and Avoidance for Multiple Class of Traffic in Sensor Networks”, IEEE Transaction on Consumer Electronics, Volume. 56, Issue. 3, pp 1387-1394, 2010. 5. Chieh-Yih Wan, Shane B. Eisenman and Andrew T. Campbell, “CODA: Congestion Detection and Avoidance in Sensor Networks”, in Proc. ACM SenSys, pp 266-279, 2003. 6. C. Wang, B. Li, K. Sohraby, M. Daneshmand and Y. Hu, “Upstream Congestion Control in Wireless Sensor Networks Through Cross-Layer Optimization”, IEEE Journal On Selected Areas in Communication, Volume. 25, Issue. 4, pp 786-795, 2007. 7. Vivek S. Deshpande, Pratiibha P. Chavan, Vijay M. Wadhi, Jagdish B. Helonde, “ Congestion Control in Wireless Sensor Networks by using Differed Reporting Rate”, IEEE 2012 World Congress on Information and Communication Technologies, pp 209-213, 2012. 8. Fengyuan Ren, Tao He, Sajal K. Das and Chuang Lin, “Traffic-Aware Dynamic Routing to Alleviate Congestion in Wireless Sensor Networks”, IEEE Transaction on Parallel and Distributed System, Volume. 22, Issue. 9, pp 1585-1599, 2011. 9. Vivek Deshpande, Prachi sarode and Sambhaji Sarode, “Root Cause Analysis of Congestion in Wireless Sensor Networks”, International Journal of Computer Application, Volume. 1, Issue. 18, pp 27-30, 2010. 10. Swastik Brahma, Mainak Chatterjee, Kevin Kwiat and Pramod K. Varshney, “Traffic management in wireless sensor network: Decoupling congestion control and fairness”, Elsevier Computer Communication, Volume. 35, Issue. 6, pp 670-681, 2012. 11. Muhammad Mahub Alam and Choong Seon Hong, “Congestion-Aware and Rate-Controlled Reliable Transport in Wireless Sensor Networks”, IEICE Transaction Communication Volume. E92-B, Issue. 1, pp 184-199, 2009. 12. Charalambos Sergiou, Vasos Vassilliou and Aristodemos Paphitis, “Hierarchical Tree Alternative Path (HTAP) algorithm for congestion control in wireless sensor networks”, Elsevier Ad Hoc Networks, Volume. 11, Issue. 1, pp 257-272, 2013. | Authors: | Gajendra Sanjay Vyas, Vivek S. Deshpande | Paper Title: | Effect of Multiple Sinks on the Performance of Wireless Sensor Networks | 11-14 |
| Authors: | Gajendra Sanjay Vyas, Vivek S. Deshpande | | | | | |
| Paper Title: | Effect of Multiple Sinks on the Performance of Wireless Sensor Networks | | | | | |
| | <table border="1"> <tr> <td>Authors:</td> <td>Pawan D. Kale, D. S. Chaudhari</td> </tr> <tr> <td>Paper Title:</td> <td>A Review on Maximum Power Point Tracking (MPPT) Controlling Methods for A Photovoltaic System</td> </tr> </table> | Authors: | Pawan D. Kale, D. S. Chaudhari | Paper Title: | A Review on Maximum Power Point Tracking (MPPT) Controlling Methods for A Photovoltaic System | |
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| Paper Title: | A Review on Maximum Power Point Tracking (MPPT) Controlling Methods for A Photovoltaic System | | | | | |

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| 5. | <p>Abstract: A renewable energy had been used in solar power generation since years ago. Solar energy is one of the forms of renewable energy source and it brings benefits to the residential that uses it as their alternative power supply. In order to increase the efficiency of system during rapid changing environmental conditions; system will adapt some Maximum Power Point Tracking (MPPT) methods. This paper presents a review on various MPPT methods for variable environmental conditions (i.e. variable temperature and irradiation level), their difficulty while tracking and how those difficulties can be overcome efficiently by the other techniques. Apart from all the methods, an open circuit and slope detection tracking technique is found to be an efficient technique with respect to tracking speed and accuracy. This technique can avoid the unnecessary amount of power loss and therefore maintaining the power efficiency. The Programmable system on chip (PSoC) is used as a Maximum Power Point Tracking (MPPT) controller.</p> <p>Keywords: MPP (Maximum Power Point), MPPT (Maximum Power Point Tracking), PSoC (Programmable System on Chip), PV (Photovoltaic) panel.</p> <p>References:</p> <ol style="list-style-type: none"> 1. C.Y. Yang, "Highly efficient Analog Maximum Power Point Tracking (AMPPT) in a Photovoltaic System," IEEE Trans. On Circuits and Systems—I: vol. 59, 2012, pp. 1546–1556. 2. R.A. Shayani, Senior Member IEEE, "Photovoltaic Generation Penetration Limits in Radial Distribution Systems," IEEE Trans. On Power Systems, Vol. 26, 2011, pp. 1625–1631. 3. R. Namba, "Development of PSoC Microcontroller Based Solar Energy Storage System," SICE Annual Conf. 2011, Waseda University, Tokyo, Japan, 2011, pp. 718–721. 4. D. Sera, "Improved MPPT method for rapidly changing environmental conditions," IEEE Trans. On Industrial Electronics, Institute of Energy Technology, Aalborg, Denmark, 2006, pp.1420–1425. 5. F. Iov, "Power Electronics and Control of Renewable Energy Systems," IEEE Trans. On Industrial Electronics, Vol. 55, 2007, pp.1–27. 6. R. Mastromauro, "Control Issues in Single Stage Photovoltaic Systems: MPPT, Current and Voltage Control," IEEE Trans. On Industrial Informatics, Vol. 8, 2012, pp.241–254. 7. D. Sera, "Optimized Maximum Power Point Tracker for Fast-Changing Environmental Conditions," IEEE Trans. On Industrial Electronics, Vol. 55, 2008, pp. 2629–2637. 8. A. Ponniran, "A Design of Low Power Single Axis Solar Tracking System Regardless of Motor Speed," International Journal of Integrated Engineering, Vol. 3, 2011, pp.5–9. 9. W. Xiao, "Real-Time Identification of Optimal Operating Points in Photovoltaic Power Systems," IEEE Trans. On Industrial Electronics, Vol. 53, 2006, pp.1017–1026. | 15-19 | | | | |
| 6. | <table border="1"> <tr> <td>Authors:</td> <td>Rajeev Kr. Singh, Shams Tabrej Alam, Geetali Chakraborty, Sudarshan Chakravorty</td> </tr> <tr> <td>Paper Title:</td> <td>A Spatio-Temporal Adaptive Processing For Modeling of Seaborne Clutter</td> </tr> </table> <p>Abstract: The presence of clutter is a big obstacle for proper detection of targets in seaborne radar systems. Spatio-temporal adaptive processing (STAP) helps to remove the problem of clutter by exploiting Doppler spread. The modeling requirements of clutter for spatio-temporal adaptive processing are considered in this study. Modeling of the internal motion of seaborne clutter and its effect in the clutter domain is also studied.</p> <p>Keywords: Adaptive processing, Doppler spread, Intrinsic clutter motion, Seaborne clutter, Spatio-temporal.</p> <p>References:</p> <ol style="list-style-type: none"> 1. KLEMM R.: „Principles of space–time adaptive processing’, In ‘IEE radar, sonar, navigation and avionics series’ (IEE, London, UK, 2002), vol. 12. 2. WARD J.: ‘Space–time adaptive processing for airborne radar’. Technical Report 1015, Lincoln Laboratory, Massachusetts Institute of Technology, USA, December 1994. 3. HERBERT G.M., RICHARDSON P.G.: ‘Benefits of space–time adaptive processing (STAP) in bistatic airborne radar’, IEE Proc. Radar Sonar Navig., 2003, 150, (1), pp. 13–17. 4. FRIEDLANDER A.L., GREENSTEIN L.J.: ‘A generalized clutter computation procedure for airborne pulse Doppler radars’, IEEE Trans. Aerosp. Electron. Syst., 1970, AES-6, (1), pp. 51–61. 5. BROWNING D.J., SUMMERS J.E.: ‘Computer modeling of ground clutter in airborne radar’. Proc. IEE Colloquium on Radar System Modeling, London, UK, October 1998, pp. 6/1–6/6. 6. ALABASTER C.M., HUGHES E.: „Clutter modelling for airborne pulse Doppler radar’. Proc. IET Seminar on Radar Clutter Modeling, London, UK, February 2008, pp. 51–55. 7. HAYWARD S.D., FENWICK A.J., RICHARDSON P.G.: ‘Clutter simulation for adaptive airborne radar’. Proc. Int. Conf. on Radar, Paris, France, May 1994, pp. 178–183. 8. BILLINGSLEY J.B.: ‘Low angle radar land clutter’ (William Andrew Publishing, 2002) | Authors: | Rajeev Kr. Singh, Shams Tabrej Alam, Geetali Chakraborty, Sudarshan Chakravorty | Paper Title: | A Spatio-Temporal Adaptive Processing For Modeling of Seaborne Clutter | 20-22 |
| Authors: | Rajeev Kr. Singh, Shams Tabrej Alam, Geetali Chakraborty, Sudarshan Chakravorty | | | | | |
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| 7. | <table border="1"> <tr> <td>Authors:</td> <td>Sudipta Kumar Banerjee, Sourav Saha, Rajarshi Sanyal</td> </tr> <tr> <td>Paper Title:</td> <td>Dual Band and Tri Band Pentagonal Microstrip Antenna for Wireless Communication Systems</td> </tr> </table> <p>Abstract: This paper presents multiband compact pentagonal shaped antenna. A flexible design approach allows both dual band and triple band keeping the constant coaxial feed location and using the simple variation of radiating edge; the dual band and triple band operations are possible. Such antennas are implemented on RTduroid 5880 dielectric. All the simulations are carried out in IE3D software.</p> <p>Keywords: Dual band, pentagonal patch, radiating arm, tri band.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Liu, W.-C., C.-M. Wu, and N.-C. Chu, "A compact CPW-fed slotted-patch antenna for dual-band operation," IEEE Antennas and Wireless Propagation Letters, Vol. 9, 110–113, 2010 2. S. Hong, Small annular slot antenna with capacitor loading, Electron Lett 36 (2000), 110–111. 3. E. Wang, J. Zheng, Y. Liu "A novel dual-band patch antenna for WLAN communication" Progress in Electromagnetic Research C, Vol. | Authors: | Sudipta Kumar Banerjee, Sourav Saha, Rajarshi Sanyal | Paper Title: | Dual Band and Tri Band Pentagonal Microstrip Antenna for Wireless Communication Systems | 23-26 |
| Authors: | Sudipta Kumar Banerjee, Sourav Saha, Rajarshi Sanyal | | | | | |
| Paper Title: | Dual Band and Tri Band Pentagonal Microstrip Antenna for Wireless Communication Systems | | | | | |

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| | 6, 93-102, 2009. | |
| | 4. Lee, Y.-C. and J.-S. Sun, \Compact printed slot antennas for wireless dual-band multi-band operations," Progress In Electromagnetics Research, Vol. 88, 289{305, 2008 | |
| | 5. Ansari, J. A., S. K. Dubey, P. Singh, R. U. Khan, and B. R. Vishvakarma, \Analysis of compact H-shaped microstrip patch antenna," Microwave Opti. Technol. Lett., Vol. 50, 1779 | |
| | 6. S.Lin, S.-J. and J.-S. Row, \Monopolar patch antenna with dual- band and wideband operations," IEEE Transactions on Antennas and Propagation, Vol. 56, 900{903, 2008. | |
| | 7. G. Kumar, K. P. Ray, "Broadband Microstrip Antennas", Artech House, USA, 2003. | |
| 8. | Authors: | Lakshmana Phaneendra Maguluri, Keshav Rajapanthula, P. Naga Srinivasu |
| | Paper Title: | A Comparative Analysis of Clustering based Segmentation Algorithms in Microarray Images |
| | <p>Abstract: As of now, several improvements have been carried out to increase the performance of previous conventional clustering algorithms for image segmentation. However, most of them tend to have met with unsatisfactory results. In order to overcome some of the drawback like dead centers and trapped centers, in this article presents a new clustering-based segmentation technique that may be able to overcome some of the drawbacks we are passing with conventional clustering algorithms. We named this clustering algorithm as optimized k-means clustering algorithm for image segmentation. OKM algorithm that can homogenously segment an image into regions of interest with the capability of avoiding the dead centre and trapped centre problems. The robustness of the OKM algorithm can be observed from the qualitative and quantitative analyses.</p> <p>Keywords: Clustering algorithms; dead center problem; Microarray processing; Image segmentation; Microarray processing.</p> <p>References:</p> <ol style="list-style-type: none"> 1. M.Schena, D.Shalon, Ronald W.davis and Patrick O.Brown, "Quantitative Monitoring of gene expression patterns with a complementary DNA microarray", Science, 270,199,pp:467-470. 2. Wei-Bang Chen, Chengcui Zhang and Wen-Lin Liu, "An Automated Gridding and Segmentation method for cDNA Microarray Image Analysis", 19th IEEE Symposium on Computer-Based Medical Systems. 3. Tsung-Han Tsai Chein-Po Yang, Wei-ChiTsai, Pin-Hua Chen, "Error Reduction on Automatic Segmentation in Microarray Image", IEEE 2007. 4. Eleni Zacharia and Dimitris Maroulis, "Microarray Image Analysis based on an Evolutionary Approach" 2008 IEEE. 5. R.Hirata, J.Barrera, R.F.Hashimoto and D.o.Dantas, " Microarray gridding by mathematical morphology", in Proceedings of 14th Brazilian Symposium on Computer Graphics and Image Processing, 2001, pp: 112-119 6. Volkan Uslan, Omur Bucak, " clustering based spot segmentation of microarray cDNA Microarray Images ", International Conference of the IEE EMBS , 2010. 7. Siti Naraini Sulaiman, Nor Ashidi Mat Isa, " Denoising based Clustering Algorithms for Segmentation of Low level of Salt and Pepper Noise Corrupted Images", IEEE Transactions on Consumer Electronics, Vol. 56, No.4, November 2010. 8. LJun-Hao Zhang, Ming Hu HA , Jing Wu," Implementation of Rough Fuzzy K-means Clustering Algorithm in Matlab", Proceedings of Ninth International Conference on Machine Learning and Cybernetics", July 2010. 9. Nor Ashidi Mat Isa," Adaptive Fuzzy Moving K-means Clustering Algorithm for Image Segmentation", IEEE 2009. 10. N.A.M. Isa, S.A. Salamah, and U.K. Ngah, "Adaptive fuzzy moving K-means clustering algorithm for image segmenta-tion", IEEE T. Consum. Electr. 55, 2145-2153 (2010). 11. F.U. Siddiqui and N.A.M. Isa, "Enhanced moving K-means(EMKM) algorithm for image segmentation", IEEE T. Consum. Electr. 57, 833-841 (2011). 12. Lakshamana phaneendra maguluri-BEMD with Clustering Algorithm for Segmentation of Microarray Image. International Journal of Electronics Communication and Computer Engineering Volume 4, Issue 2, ISSN (Online): 2249-071X, ISSN (Print): 2278-4209-2013 | |
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| 9. | Authors: | Er. Kiran V. Patel, Chetna M. Vyas |
| | Paper Title: | Innovative Idea of Cleaner Production as a Powerful Combination of Cost Savings and Environmental Improvements |
| | <p>Abstract: Sustainable development is a strategic choice that must be made by both developing and developed countries. For a developing country like India, the precondition for sustainable development is development. The path of relatively rapid economic growth and gradual improvements in the quality of development must be taken in order to meet people's current and future needs for basic necessities and their desires for higher living standards, and in order to consolidate the nation's strength. Only when the economic growth rate reaches and is sustained at a certain level, can poverty be eradicated, people's livelihoods improved and the necessary forces and conditions for supporting sustainable development be provided. While the economy is undergoing rapid development, it will be necessary to ensure rational utilization of natural resources and protection of the environment. Cleaner production is the continuous application of an integrated preventative environmental strategy applied to processes, products and services to increase ecoefficiency and to reduce risks for humans and the environment.</p> <p>Keywords: Policy, Energy, Clean, Environment, awareness, recycling, resource.</p> <p>References:</p> <ol style="list-style-type: none"> 1. ANZECC, 1999. Australia and New Zealand Environment and Conversation Council. National Packaging Covenant, www.packcoun.com.au/covt.html. 2. ABS, 1999. Environment Protection Expenditure. Catalogue No. 4603, July 1999 3. DSD, 2000. Queensland's Merchandise Trade: Industry Profiles, August, 2000. Queensland Department of State Development. www.sd.qld.gov.au 4. Environment Australia, 1999 National Packaging Covenant. http://www.ea.gov.au/industry/waste/covenant/ 5. Hayes. P & Smith. K, 1993. The Global Greenhouse Regime. Who Pays? United Nations University, United Nations University Press, www.unu.edu/unupress/ | |
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| | Authors: | Gursewak Singh, Rajveer Kaur, Himanshu Sharma |

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| 10. | Paper Title: | Various Attacks and their Countermeasure on all Layers of RFID System | |
| | <p>Abstract: RFID (radio frequency identification) system is one of the most widely used technologies due to its broad applicability and low cost. RFID systems have various advantages but still it is prone to various attacks which try to degrade the performance of the system. As RFID system is a low cost system so security become much more challenging, because as we know the usual security mechanisms are infeasible to use on low cost tags due to their resource constrains so in this paper we present some countermeasure to prevent the attacks. The main goal of this paper is to easily define individually layers attacks and their procedure to prevent them.</p> <p>Keywords: RFID, countermeasures, tags, reader, attacks, layers.</p> <p>References:</p> <ol style="list-style-type: none"> 1. G. P Rotter, "A Framework for assessing RFID system security and privacy risks."IEEE pervasive computing, vol. 7, no 2, pp,70-77, 200 2. Center, A.I:900MHz class 0 radio frequencies (RF) Identification Tag Specification. In: Draft, www.epcglobalinc.org/standards.org/standards/specs/900_Mhz_class_0_RFIDtag_specification.pdf,(2003). 3. Shepard, RFID: Radio Frequency Identification. NewYork:Mc-Graw-Hill, 2005 International Journal of Emerging Science and Engineering (IJESE) ISSN: 2319-6378, Volume-1, Issue-5, March 201342 4. A. Juels, "RFID security and privacy: A research survey," IEEE J. Sel.Areas Commun., vol. 24, no. 2, pp. 381-394, Feb. 2006. 5. J. Ayoade, "Roadmap to solving security and privacy concerns in RFIDsystems," Comput. Law Security Rep., vol. 23, pp. 555-561, Sep. 2007. 6. Garfinkel, S., Juels, A., Pappu, R.: RFID Privacy: An Overview of Problems and ProposedSolutions. In: IEEE Security & Privacy, Vol. 3. (2005) 34-43 7. Karygiannis, A., Phillips, T., Tsiertzopoulos, A.: RFID Security: A Taxonomy of Risk. In:Proc. of China'Com '06. (2006) 1-8. 8. Karygiannis, T., Eyd, B., Barber, G., Bunn, L., Phillips, T.: Guidelines for Securing Radio Frequency Identification (RFID) Systems. In: NIST Special Publication 800-98, National Institute of Standards and Tecnology (2007) 9. Rieback, M.R., Bruno, B., Tanenbaum, A.S. Is Your Cat Infected with a Computer Virus?In: Proc. of the 4th IEEE Int'l Conf. on Pervasive Computing and Communications. (2006). 10. Juels, A., Rivest, R.,Szydlo,M.: The Blocker Tag: Selective Blocking of RFID Tags for ConsumerPrivacy. In: Proc. of the 10th ACM Conf. on Computer and Communication Security.(2003) 103-111 | | 38-42 |
| 11. | Authors: | Pratvina Talele, Milind Penurkar, Saranga Bhutada, Harsha Talele | |
| | Paper Title: | A Token based Distributed Group Mutual Exclusion Algorithm with Quorums for MANET | |
| <p>Abstract: The group mutual exclusion problem extends the traditional mutual exclusion problem by associating a type (or a group) with each critical section. In this problem, processes requesting critical sections of the same type can execute their critical sections concurrently. However, processes requesting critical sections of different types must execute their critical sections in a mutually exclusive manner. A distributed algorithm is used for the group mutual exclusion problem in asynchronous message passing distributed systems for MANET. This algorithm is based on tokens, and a process that obtains a token can enter a critical section. To reduce message complexity, it uses a coterie as a communication structure, when a process sends a request messages. Informally, a coterie is a set of quorums, each of which is a subset of the process set, and any two quorums share at least one process. Performance of the proposed algorithm is presented. In particular, the proposed algorithm can achieve high concurrency, which is a performance measure for the number of processes that can be in a critical section simultaneously.</p> <p>Keywords: Distributed systems, critical section, mutual exclusion.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Hirotsugu Kakugawa, Sayaka Kamei, Toshimitsu Masuzawa, "A Token-Based Distributed Group Mutual Exclusion Algorithm with Quorums", Published by the IEEE Computer Society 1045-9219/08/\$25.00 2008 IEEE. 2. Kayan Erciyes, Orhan Dagdeviren, "A Distributed Mutual Exclusion Algorithm for Mobile Ad Hoc Networks", International Journal of Computer Networks & communications Vol.4, N0.2, March 2012. 3. Roberto BALDONI, Antonino VIRGILLITO, Roberto PETRASSI, "A Distributed Mutual Exclusion Algorithm for Mobile Ad-Hoc Networks", Dipartimento di Informatica e Sistemistica Universita di Roma "La Sapienza" Via Salaria 113, 00198 Roma, Italia 2001. 4. Murali Parameswaran, Chittaranjan Hota, "A Novel Permission-based Reliable Distributed Mutual Exclusion Algorithm for MANETs", 978-1-4244-7202-4/10/\$26.00 ©2010 IEEE. 5. M. Benchaiba, A. Bouabdallah, N. Badache, M. Ahmed-Nacer, "Distributed Mutual Exclusion Algorithm In Mobile Ad-Hoc Networks : An overview", Published in 2003. 6. Y. -J. Joung, "The Congenial Talking Philosophers Problem in Computer Networks", Distributed Computing, vol. 15, pp. 155-175, 2002. 7. Fransico J. Ros, Pedro M. Ruiz, "Implementing a New Manet Unicast Routing Protocol in NS2", University of Mercia, December 2004. | | 43-48 | |
| Authors: | Neha P. Sathe, Vivek S. Deshpande | | |
| Paper Title: | Data Dissemination Model for IP cloud through Wireless Sensor Network | | |
| <p>Abstract: Different techniques are used to make data available from WSN through Internet, like Embedded Gateway, 6LowPAN technique etc. for the utilization. The user at any location can access the information using such techniques of WSN and IP connectivity. The sensor device is small and has low computation power and memory thus perceived as not suitable to be loaded with the high resource IP capabilities directly, which presents a significant challenge to establish such interconnection. In this paper the data dissemination model is proposed, which is having capability to provide a data from WSN in IP network compatible format. The proposed model utilizes MSP430 Microcontroller along with ZigBee module to represent the wireless sensing nodes. Embedded Gateway used will be regular computer but termed to be the embedded due to its minimum expected specific functionality requirement. Collected data is required to be preserved and made continuously available to satisfy the</p> | | | |

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| 12. | <p>need of user at any time, it will be stored along with the time stamps on the developed Web page.</p> <p>Keywords: Wireless Sensor Networks, LoWPAN, MSP430, ZigBee Module, Embedded Gateway.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Neha P.sathe, Vasundhra Ghate,Vivek deshpande ,P.S.Mahajani, ” Wireles sensor network over IP”,IJCSMS, serial publication , volume 2 No. 2 2010. 2. Aishwarya, V.; Felix Enigo, V.S.,” IP based Wireless Sensor Network with Web Interface”, Recent Trends in Information Technology (ICRTIT) International Conference, Chennai, India 2011 3. Raskovic, D. Revuri, V.; Giessel, D.; Milenkovic, A ,” Embedded Web Server for Wireless Sensor Networks”, 41st Southeastern Symposium on System Theory, Tullahoma, 2009. 4. Ping Pong, Chang Chen; Kejie Li; Li Sui, ,” The Design and Realization of Embedded Gateway Based on WSN “,International Conference on Computer Science and Software Engineering, Wuhan, China,2008 5. User guide for MSP430 www.ti.ocm | 49-52 | | | | |
| 13. | <table border="1"> <tr> <td>Authors:</td> <td>Konijeti Meghana, Y. Madhavi Latha, V. Samson Deva Kumar, Suresh Angadi</td> </tr> <tr> <td>Paper Title:</td> <td>Methodology of Cloud Computing</td> </tr> </table> <p>Abstract: ‘Cloud’-computing is a very popular term in this modern and computer world in IT solution which is provided as a service over the web instead of customer owing and buying the solution. It is a large group of interrelation of computers. Over a decade of research it achieves in virtualization, distributed computing, utility computing and networking. It creates service oriented architecture by providing software and platforms as services. It reduced information technology for end –user on demand services and many of the other things related to it. Technologies such as cluster, grid and Cloud computing has all aimed for providing access to large number of computer in a virtualized manner such as invisible , by collecting resources and offering single system viewing and more over in addition to that one of the main aim of these technologies is Delivering computing as a Utility. These describes a business model while consumers pay provides based on usage and it is same to as the way in which we presently obtain services from the community utility services such as Water, Electricity and telephony</p> <p>Keywords: Cloud-computing, Security, Privacy, Commentary.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Wikipedia,—Cyberinfrastructurel, http://en.wikipedia.org/wiki/Cyberinfrastructure 2. R. Buyya, C. S. Yeo, S. Venugopal, J. Broberg, and I. Brandic, Cloud computing and emerging IT platforms: Vision, hype, and reality for delivering computing as the 5th utility,Future Generation Computer Systems-- 25:599À 616, 2009. 3. M.A. Vouk, —Virtualization of Information Technology Resourcesl, in Electronic Commerce: A Managerial Perspective 2008, 5th Edition y Turban, Prentice-Hall Business Publishing, to appear. 4. Mike P. Papazoglou, —Service -Oriented Computing: Concepts, Characteristics and Directionsl, Tilburg University, INFOLAB, 5. Wikipedia,—Workflowl, http://en.wikipedia.org/wiki/Workflow 6. LeadProject, https://portal.leadproject.org/ 7. Lijun Mei, W.K. Chan, T.H. Tse, —A Tale of Clouds: Paradigm Comparisons and Some Thoughts on Research Issuesl, To appear in Proceedings of the 2008 IEEE Asia-Pacific Services Computing Conference (APSCC 2008), IEEE Computer Society Press, Los Alamitos, CA 8. Mike Ricciuti, —Stallman: Cloud computingis'stupidity'l, http://news.cnet.com/8301-1001_3- 10054253-92.html 9. Jon Brodtkin, —Gartner: Seven cloud-computing security risksl, InfoWord, http://www.infoworld.com/article/08/07/02/Gartner_Seven_cloudcomputing_security_risks_1.html, July 2008 10. Microsoft Live Mesh, http://www.mesh.com 11. Mladen A. Vouk, —Cloud Computing – Issues, Research and Implementationsl, Proceedings of the ITI 2008 30th Int. Conf. on Information Technology Interfaces, June 23-26, 2008, Cavtat, Croatia 12. L. M. Vaquero, L. Rodero-Merino, J. Caceres, and M. Lindner, A break in the clouds: Towards a cloud definition, SIGCOMM Computer Communications Review, 39:50À 55, 2009 13. http://www.ibs.com.cy | Authors: | Konijeti Meghana, Y. Madhavi Latha, V. Samson Deva Kumar, Suresh Angadi | Paper Title: | Methodology of Cloud Computing | 53-55 |
| Authors: | Konijeti Meghana, Y. Madhavi Latha, V. Samson Deva Kumar, Suresh Angadi | | | | | |
| Paper Title: | Methodology of Cloud Computing | | | | | |
| 14. | <table border="1"> <tr> <td>Authors:</td> <td>Gurdeep Kaur, Gaganpreet Kaur, Sushil Garg</td> </tr> <tr> <td>Paper Title:</td> <td>A Survey on Annotation Using Natural Language Vocabulary in CBIR</td> </tr> </table> <p>Abstract: Efforts to reduce semantic gaps in CBIR is an ongoing process, numerous models have been proposed to reduce this gap, each one of these models has some advantages and some limitations. Increase in the volume of multimedia repository has further complicated the design and development of an appropriate model which can help in eliminating the semantic gap [3]. This paper examines the problems that may arise as a result of semantic gap, various models which are presently available for reducing the semantic gap [3].</p> <p>Keywords: Fast Image Searching in Huge databases (FISH), fuzzydataset, Fuzzy support vector machine (FSVM), manualannotation, region of interest,semantic.</p> <p>References:</p> <ol style="list-style-type: none"> 1. B.S. Manjunath, Jens- Rainer Ohm, Vinod V.Vasudevan, Akio Yamada,“Color and texture descriptors”, In IEEE Transactions on Circuits and Systems for Video Technology, Vol.11, Issue 6, pp. 703–715, June 2001. 2. Bilge Günsel, Sanem Sariel and Oguz Icoglu, “Content – Based Access to Art Paintings”, In IEEE International Conference on Image Processing, ISBN: 0-7803-9134-9, Vol. 2, pp. 558-61, Sep 2005. 3. Dorai C,Venkatesh, S., “Bridging the Semantic Gap with Computational Media Aesthetics”, IEEE MultiMedia, Vol.10, Issue 2, pp. 15-17, 2003. 4. E.D. Hirsch Jr., “The Knowledge Deficit”, publisher: Houghton Mifflin Harcourt, ISBN -10: 0618657312, ISBN- 13: 978-0618657315, April 2006. 5. H.Tamura, S. Mori, T. Yamawaki, “Textural features corresponding to visual perception”, In IEEE Transactions on Systems, Man and Cybernetics, Vol. 8, Issue 6, 1978, pp. 460–473. | Authors: | Gurdeep Kaur, Gaganpreet Kaur, Sushil Garg | Paper Title: | A Survey on Annotation Using Natural Language Vocabulary in CBIR | 56-58 |
| Authors: | Gurdeep Kaur, Gaganpreet Kaur, Sushil Garg | | | | | |
| Paper Title: | A Survey on Annotation Using Natural Language Vocabulary in CBIR | | | | | |

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| | <p>6. Jasmeet kaur1, Seema”Semantic fuzzy Colour Algorithm for Image Retrieval Using Hindi Dialects” In International Journal of Advanced Research in Computer and Communication Engineering Vol. 1, Issue 7, September 2012</p> <p>7. Jun Wei Han and Lei Guo, “A New Image Retrieval System Supporting Query by Semantics and Example”, In IEEE International Conference on Image Processing, Vol. 3, pp.953- 956, 2002.</p> <p>8. Manimala Singha and K.Hemachandran “Content Based Image Retrieval using Color and Texture” In Signal & Image Processing : An International Journal (SIPIJ) Vol.3, No.1, February 2012.</p> <p>9. P.G.Reddy, “Extraction of Image Features for an Effective CBIR System”, In IEEE Conference Publications - Recent Advances in Space Technology Services and Climate Change (RSTSCC), ISBN: 978-1-4244-9184-1, pp. 138-142, 2010.</p> <p>10. R. Datta, D. Joshi, J. Li, and J. Z. Wang, "Image Retrieval: Ideas, Influences, and Trends of the New Age," ACM Com\puting Survey, Vol. 40, No. 2, pp. 1-60, 2008.</p> <p>11. Smeulders AWM, Worring M, Santini S, Gupta A, Jain R, “Content-Based Image Retrieval at the End of the Early Years”, In IEEE Transaction Pattern Anal Mach Intell, Vol.22, Issue 12, pp. 1349-80, 2000.</p> | | |
| 15. | <p>Authors: Raj Nandini, Himadri Singh Raghav, B. P. Singh</p> <p>Paper Title: Design of Low Power Phase Frequency Detectors for Delay Locked Loop</p> | <p>Abstract: A simple new Phase Frequency Detector design is presented in this paper. The PFD which helps Delay Locked Loop (DLL) to achieve simultaneous phase and frequency error detection is an indispensable block and plays an important role in improving the performance of the whole DLL system. Both conventional and improved PFDs are implemented using tanner 0.18 μm CMOS Process. The layouts are also designed using Tanner Tool. The maximum frequency of operation is 1 GHz when operating at 1.8V voltage supply. It can be used in DLL for high speed and low power consumption applications.</p> <p>Keywords: CMOS Integrated Circuits, Delay Locked Loop, Phase Frequency Detector, Tanner.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Ching-Che Chung and Chia-Lin Chang , “A wide range All- Digital Delay Locked Loop in 65 nm CMOS Technology,” IEEE Conference, VLSI Design Automation and Test (VLSI-DAT), pp. 66-69, April 2010. 2. Shirish Tripathi, “Design of Delay Locked Loop in 0.18μm CMOS Technology,” A thesis of Master of Technology (VLSI Design & CAD), Dept. Electronics and Communication . Eng., Thapar Univ, Patiala, 2010 3. V.Lule and V.Nasre, “ Area efficient 0.18μm CMOS Phase Frequency Detector for high speed PLL,” International Journal of Engineering Scientific and Research Publications, vol. 2, pp. 1-3, Feb 2012. 4. S.B.Rashmi and Siva S.Yellampalli, “Design of Phase Frequency Detector and Charge Pump for High Frequency PLL,” International Journal of Soft Computing and Engineering, vol.2, Issue -2, pp88-92, May 2012 5. J.M.Rabaey A.Chandrakasan and B.Nikolic, Digital Integrated Circuits, 2nd ed. , pp. 442-449 | |
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| 16. | <p>Authors: B. Dheeraj Reddy, K. Dinesh Kumar, R. Sudha</p> <p>Paper Title: Techno-Commercial Aspects of Superconducting Transformers – A Case Study</p> | <p>Abstract: On invention of High Temperature Superconductors (HTS), there is a widespread talk that superconducting transformers can now be used extensively. But there are problems like lack of a suitable superconductor, cryogenic coolers and behavior of these transformers on faults and starting transients. This paper describes the problems with superconducting technology. A comparative study has been done with a conventional distribution transformer (DTR) and the outcome is tabulated. The results show, that superconducting transformers can give an additional efficiency of 0.3 to 0.5% at double the cost of conventional transformer with an unacceptable payback period. Hence HTS Transformers are used where they are essential and viable. A final purpose of this paper is given to create a method of analysis that allows others to conduct quantitative or optimised modelling about the future HTS transformers.</p> <p>Keywords: Distribution Transformer (DTR), Fault Current Limiter (FCL), Superconductor, Superconducting Transformers (SCT), High Temperature Superconductivity (HTS).</p> <p>References:</p> <ol style="list-style-type: none"> 1. Jan Sykulski, “Superconducting Transformers”, Advanced research workshop on modern Transformers, 2004, vigo-spain. 2. Deepak Jain, Umang Lahoty, Gaurav Pathak, Vishwas Vats and R.Sudha, “Study of High Temperature Superconductor Based Transformer”, IJEECS, (pp. 261-267) 3. M. Yamamoto, M. Yamaguchi, K. Kaiho, “Superconducting Transformers”, IEEE transactions on power delivery, vol. 15, no. 2, April 2000. 4. Andrew Craig Laphorn, Irvin Chew, Wade G. Enright, and Patrick S. Bodger, “HTS Transformer: Construction Details, Test Results, and Noted Failure Mechanisms,” IEEE Transaction on Power Delivery, VOL. 26, NO. 1, January 2011. 5. Swarn Kalsi, “Superconducting Transformers Using Continuously Transposed Cable.” A General Cable Superconductors White Paper. 6. T. Janowski, B.A.Glowacki, G.Woatsiewicz, S. Kozak, J. Kozak, B. Kondratowicz, Kutewicz, M. Majka and M.Wozniak “Fault current limitation in power network by the superconducting transformers made of 2G HTS,” IEEE Trans. On Applied Superconductivity, Vol. 21, No. 3, June 2011 -1413. 7. Eleonora darie, Emanuel darie, “Fault current Limiter based on high temperature super conductor”- ICESA- 2007. | |
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| 17. | <p>Authors: K. Veeramanikandan, R. Ezhilarasi, R. Brindha</p> <p>Paper Title: An FPGA-Based Real-Time Face Detection & Recognition System across Illumination</p> | <p>Abstract: Automated face recognition is an interesting computer vision problem with many commercial and law enforcement applications. Mug shot matching, user verification and user access control, crowd surveillance, enhanced human computer interaction all become possible if an effective face recognition system can be implemented. This paper presents a complete real-time face recognition system consisting of face detection, recognition and a down sampling module using an FPGA. The focus is on subspace techniques, investigating the use of image Pre-processing applied as a preliminary step in order to reduce error rates. Our method is simple and fast, which makes it useful for real-time applications, embedded systems, or mobile devices with limited resources.</p> | |
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Keywords: Ada Boost, Face recognition, face detection, Mug shot matching.

References:

1. Janarbak Matai, Ali Irturk and Ryan Kastner, "Design and Implementation of an FPGA-based Real-Time Face Recognition System", IEEE International Symposium on Field-Programmable Custom Computing Machines 2011.
2. Mohammad Said El-Bashir, "Face Recognition Using Multi-Classifer" Applied Mathematical Sciences, Vol. 6, 2012, no. 45, 2235 – 2244.
3. K.Padmaja and Dr.T.N.Prabakar M.Tech., Ph.D "FPGA Based Real Time Face Detection using Adaboost and Histogram Equalization" IEEE-International Conference On Advances In Engineering, Science And Management (ICAESM -2012) March 30, 31, 2012.

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| Authors: | Ines Chihi, Afef Abdelkrim, Mohamed Benrejeb |
| Paper Title: | Characterization of Electromyography Signals of the Forearm Muscles from Pen-Tip Coordinates, Using RELS Algorithm |

Abstract: Used in several domains (biotechnology engineering, medical diagnosis, etc.), the reconstitution of ElectroMyoGraphic signals (EMG) is the main contribution of this paper. We propose a linear mathematical structure to generate Integrated ElectroMyoGraphic signals IEMG of the forearm muscles from the coordinates of handwritten traces. The identification of this structure is based on Recursive Extended Least Square algorithm (RELS).

Keywords: Coordinates of handwritten traces, Extended Least Square algorithm, forearm muscles, Integrated ElectroMyoGraphic signals.

References:

1. M. Benrejeb and A. El Abed-Abdelkrim, Neuro fuzzy model of the handwriting process, ICSDS, China, 2002, pp.157-160.
2. M. Benrejeb, A. El Abed-Abdelkrim and S. Bel Hadj Alim, Handwriting process controlled by neuronal and neuro-fuzzy IMC approaches, ISCIII'03, Nabeul, 2003, pp. 16-20.
3. I. Chihi, A. Abdelkrim and M. Benrejeb, Reconstitution of electromyographic signals from pen-tip velocity, SOSE, Genova, Jull, 2012.
4. I. Chihi, A. Abdelkrim and M. Benrejeb, Analysis of handwriting velocity to identify handwriting processes from electromyographic signals, American Journal of Applied Sciences (AJAS), vol. 9 (10), 2012, pp. 1742-1756.
5. D. Van Der Gon, J.P Thuring and J. Strackee, "A handwriting simulator," Physics in Medical Biology, 1962, pp. 407- 414.
6. J.S. MacDonald, "Experimental studies of handwriting signals", PhD Dissertation, Mass. Inst. Tech., Cambridge, 1964.
7. M.Yasuhara, Experimental studies of handwriting process, Rep. Univ. Electro-Comm. , Japon, 1975, pp. 233-254.
8. Y. Iguider and M. Yasuhara, "Extracting control pulses of handwriting movement", Trans. of the Soc. Inst. and Cent. Eng., vol. 31 (8), Japan, 1995, pp. 1175-1184.
9. Y. Iguider, M. Yasuhara, "An active recognition pulse of handwriting isolated Arabic characters", Trans, of the Soc. Inst. And Cent. Eng., Japan 1996, vol. 32 (8), pp. 1267-1276.
10. S. Edelman and T. Flash, "A model of handwriting, Biological Cybernetics", Springer Verlag, vol. 57, 1987, pp. 25-36.
11. M. Sano, T. Kosaku and Y. Murata, "Modelling of human handwriting motion by electromyographic signals on forearm muscles", CCCT'03, Orlando-Florida, 2003.
12. K. Nagata, M. Yamada and K. Magatani, "Development of the assist system to operate a computer for the disabled using multichannel surface EMG," The IEEE Engineering in Medicine and Biology Society, 26th Annual International conference, vol. 7, 2004, pp. 4952-4957..
13. O. Fukuda, T. Tsuji and M. Kaneko, "An EMG Controlled Pointing Device Using a Neural Network," Transaction of the Society of Instrument and Control Engineers, vol. 37 (5), 2000, pp.425-431.
14. O. FUKUDA, N. Bu and T. Tsuji, "Control of an Externally Powered Prosthetic Forearm Using Raw-EMG Signals," Transaction of the Society of Instrument and Control Engineers, vol. 40, (11), 2004, pp. 1124-1131.
15. I. Chihi, C. Ghorbel, A. Abdelkrim and M. Benrejeb, "Parametric identification of handwriting system based on RLS algorithm", ICCAS, Séoul, Oct, 2011.
16. A. Abdelkrim, "Contribution à la modélisation du processus d'écriture à la main par approches relevant le calcul évolutif", PhD, ENIT, Tunisia, 2005
17. M. Benrejeb, A. El Abed-Abdelkrim and M. Sano, "Sur l'étude du processus d'écriture à la main". Approches classiques et non conventionnelles, Revue e-STA, 2, 4, quatrième trimestre 2005.
18. P. Borne, G. Dauphin-Tanguy, J.P. Richard, F. Rotella and I. Zambettakis, "Modélisation et identification des processus ", Tomes 1 et 2, Ed. Technip., Paris, 1992.
19. I. D. Landau, "Identification et commande des systèmes", Hermès, Paris, 1993.
20. G. Mercere, E. Laroche and O. Prot. "Analytical Modelling and Greybox Identification of a Flexible Arm using a Linear Parameter-varying Model", IFAC Symposium on System Identification, Brussels, Belgique, July 2012.
21. K. J. Wong and E. Polak, "Identification of linear discrete-time systems using the in-instrumental variable method", IEEE Trans. Automat. Contr., AC12, 1967, pp. 707-718.
22. D. Wang, Y. Chu and F. Ding, "Auxiliary model-based RELS and MI-ELS algorithm for Hammerstein OEMA systems", Computers and Mathematics with Applications, vol. 59, 2010, pp. 3092-3098.
23. T. Tutunji, M. Molhim and E. Turki, " Mechatronic systems identification using an impulse response recursive algorithm", Simulation Modelling Practice and Theory, vol. 15, 2007, pp. 970-988.

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| Authors: | Rushabh A. Shah, Jayeshkumar Pitroda |
| Paper Title: | Effect of Water Absorption and Sorptivity on Durability of Pozzocrete Mortar |

Abstract: After evaporation of excess water in the mortar, voids inside the mortar creates capillaries which are directly related to porosity and permeability of the mortar. Proper selection of ingredients, adequate mix proportioning & followed by good construction practices lead to almost impervious mortar. Due to incomplete compaction; mortar may consists gel pores & capillary pores, which leads to low strength of mortar. Due to problems associated with the absorption test and permeability test; which are measuring the response of mortar to pressure which is rarely the driving force of fluids entering in to mortar; hence there is a need for another type of test. Such tests should measure the rate of absorption of water by capillary suction; "sorptivity" of unsaturated mortar. In this paper, an attempt is made to study sorptivity and water absorption properties of Pozzocrete mortar. The mix design was carried out for 1:3 proportion cement mortar on the basis of IS 269:1970.

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|---------------------|--|-----------------|---|---------------------|--|-------|
| 19. | <p>Keywords: Capillary suction, sorptivity, water absorption, Pozzocrete, mortar.</p> <p>References:</p> <ol style="list-style-type: none"> Atis, C. D. (2003). "Accelerated carbonation and testing of mortar made with fly ash." <i>Construction and Building Materials</i>, Vol. 17, No. 3, pp. 147-152. Bai j., Wild S, Sabir BB (2002) "Sorptivity and strength of air-cured and water cured PC-PFA-MK mortar and the influence of binder composition and carbonation depth". <i>Cement and mortar research</i> 32:1813-1821. Bentz, D., Ehlen, M., Ferraris, C., and Garboczi, E. "Sorptivity-Based Service Life Predictions for Mortar Pavements." 181–193. Caliskan, S. (2006). "Influence of curing conditions on the sorptivity and weight change characteristics of self-compacting mortar." <i>The Arabian Journal for Science and Engineering</i>, 31(1), 169-178. Claisse, P. A. (1997). "Absorption and Sorptivity of Cover Mortar." <i>Journal of Materials in Civil Engineering</i>, 9(3), 105-110. Dias, W. P. S. (2000). "Reduction of mortar sorptivity with age through carbonation." <i>Cement and Mortar Research</i>, 30(8), 1255-1261. Deepa A Sinha, Dr.A.K.Verma, Dr.K.B.Prakash (2012) "Sorptivity and waste absorption of steel fibers reinforced ternary blended mortar". <i>International journal: global research analysis (GRA)</i>, volume:1,issue:5,oct2012,issn no:2277-8160. Gonen, T. and Yazicioglu, S. (2007). "The influence of compaction pores on sorptivity and carbonation of mortar." <i>Construction and Building Materials</i>, Vol. 21, No. 5, pp. 1040-1045. Güneyisi, E. and Gesog`lu, M., (2008). "A study on durability properties of high-performance mortars incorporating high replacement levels of slag." <i>Materials and Structures</i>, Vol. 41, No. 3, pp. 479-493. Hall, C. (1977). "Water movement in porous building materials--I. Unsaturated flow theory and its applications." <i>Building and Environment</i>, 12(2), 117-125. Hall, Christopher; Hoff, William D (2012). <i>Water transport in brick, stone and mortar</i>, 2nd edn. London and New York: Taylor and Francis. http://www.routledge.com/books/details/9780415564670/. Jayeshkumar Pitroda, Dr. F S Umrigar (2013), "Evaluation of Sorptivity and Water Absorption of Concrete with Partial Replacement of Cement by Thermal Industry Waste (Fly Ash)" <i>International Journal of Engineering and Innovative Technology (IJEIT)</i> Volume 2, Issue 7, January 2013, ISSN: 2277-3754, ISO 9001:2008 Certified, pp-245-249. Prof. Jayeshkumar Pitroda, Dr. L.B.Zala, Dr.F.S.Umrigar (2013), "Durability of concrete with Partial Replacement of Cement by Paper Industry Waste (Hypo Sludge)" <i>International Journal of Innovative Technology and Exploring Engineering (IJITEE)</i> , ISSN: 2278-3075, Volume-2, Issue-3, February 2013 / 101-104 <i>International Journal of Emerging Science and Engineering (IJESE)</i> ISSN: 2319-6378, Volume-1, Issue-5, March 2013 77 Philip, John R (1957). "The theory of infiltration: 4. Sorptivity and algebraic infiltration equations". <i>Soil Science</i> 84: 257-264. Rushabh A. Shah, Prof. Jayeshkumar Pitroda (2013), "Effect of Pozzocrete as Partial Replacement with Cement in Mortar" <i>International Journal Global Research Analysis, (GRA)</i>, Volume: 2, Issue: 1, Jan 2013, ISSN No 2277 – 8160, pp-44-46. Rushabh A. Shah, Prof. Jayeshkumar Pitroda (2013), "Pozzocrete: Modern Material Partially Replaced with Cement in Mortar" <i>International Journal of Innovative Technology and Exploring Engineering (IJITEE)</i>, ISSN: 2278-3075, Volume-2, Issue-3, February 2013 / 105-108 Rushabh A. Shah, Prof. Jayeshkumar Pitroda (2013), "Fly Ash Class F: Opportunities for Development of Low Cost Mortar" <i>International Journal of Innovative Technology and Exploring Engineering (IJITEE)</i>, ISSN: 2278-3075, Volume-2, Issue-4, February 2013 / 112-115 Sulapha, P., Wong, S. F., and Wee, T. H., and Swaddiwudhipong, S.(2003). "Carbonation of mortar containing mineral admixtures." <i>Journal of Materials in Civil Engineering</i>, Vol. 15, No. 2, pp. 134-143. Song X.J, Marosszeky M, Brungs M, Munn R. 2005. Durability of fly ash based Geopolymer mortar against sulphuric acid attack 10 DBMC International Conference on Durability of Building Materials and Components, Lyon, France, 17- 20 April. | 73-77 | | | | |
| 20. | <table border="1"> <tr> <td>Authors:</td> <td>G. S. Ajay Kumar Reddy, U. Ganga Raju, P. Aravind, D. Sushma</td> </tr> <tr> <td>Paper Title:</td> <td>Intelligent Wireless Communication System of Cognitive Radio</td> </tr> </table> <p>Abstract: Radio spectrum has become the most valuable resource of the modern era due to the advancements of wireless technologies. With modern wireless systems, providers aim at offering a wide variety of applications with high data rates. It is often overlooked that as high performance wireless data services are widely deployed, the lack of additional spectrum is becoming a serious issue. Cognitive Radios are the probable solution to the current low usage of the radio spectrum. It is viewed as a novel approach for improving the utilization of the EM spectrum. The Cognitive Radio (CR) is defined as an intelligent wireless communication system that is aware of its environment and uses the methodology of understanding-by-building to learn from the environment and adapt to statistical variations in the stimuli with highly reliable communication whenever and wherever needed and efficient utilization of the radio spectrum. It is the key wireless technology that will enable a more flexible, reliable, and efficient spectrum sharing scheme.</p> <p>Keywords: Cognitive Radio (CR) is defined as an intelligent wireless communication system.</p> <p>References:</p> <ol style="list-style-type: none"> en.wikipedia.org/wiki/Cognitiveradio S. Haykin, "Cognitive Radio: Brain-empowered wireless communication" <i>IEEE Journal on Selected Areas in Communications, Special Issue on Cognitive Networks</i>, vol. 23, pp. 201-220. research.nokia.com/cognitive.radio. | Authors: | G. S. Ajay Kumar Reddy, U. Ganga Raju, P. Aravind, D. Sushma | Paper Title: | Intelligent Wireless Communication System of Cognitive Radio | 78-82 |
| Authors: | G. S. Ajay Kumar Reddy, U. Ganga Raju, P. Aravind, D. Sushma | | | | | |
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| | <table border="1"> <tr> <td>Authors:</td> <td>Adil Zaidi, Kapil Garg, Ankit Verma, Ashish Raheja</td> </tr> <tr> <td>Paper Title:</td> <td>Design & Simulation of CMOS Inverter at Nanoscale beyond 22nm</td> </tr> </table> <p>Abstract: Power and area are the two major concerns in design of any digital circuit. At present scenario low power device design and its implementation have got a significant role in the field of nano electronics. This paper investigates the applications of CMOS technology in the nanometer regime beyond 22 nm channel length where the relative study of average power dissipation of CMOS inverter is found in nano Watts. The simulation results are taken at different channel length (16nm 22nm, 32nm, 45nm) using CMOS technology with the help of (H-spice) simulation tool. The results are analyzed at different supply voltages keeping constant load capacitance (C load =1fF) apart from this, values of various internal parameters of CMOS Inverter at different channel length are calculated.</p> | Authors: | Adil Zaidi, Kapil Garg, Ankit Verma, Ashish Raheja | Paper Title: | Design & Simulation of CMOS Inverter at Nanoscale beyond 22nm | |
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| 21. | <p>Keywords: Nano-electronics, UDSM (Ultra Deep Sub-Micron) Technology, CMOS, and Scaling.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Sung-MO (Steve) Kang, Yusuf leblebici- 3rd edition CMOS Digital Integrated Circuits: Analysis and Design. 2. Behzad Razavi, Tata McGraw-Hill Education, Design of Analog CMOS Integrated Circuits page-6. 3. Hon Sum Philip Wong, David J. Frank, Paul M. Solomon, Clementh J. Wann, & Jeffrey J. Welser, Nanoscale CMOS; PROCEEDINGS OF THE IEEE, VOL. 87, NO. 4, APRIL 1999 4. J. M. Rabaey, Digital Integrated Circuits. Englewood Cliffs, NJ: Prentice Hall, 1996. 5. Sylvester, Senior Member IEEE, and Ashish Srivastava, Member IEEE; Computer-Aided Design for Low-Power Robust Computing in Nanoscale CMOS. 6. Fariborz Assaderaghi, Member, IEEE, Dennis Sinitzky, Stephen A. Parke, Jeffrey Bokor, Ping K. KO, Fellow, IEEE, and Chenming Hu, Fellow, IEEE; Dynamic Threshold-Voltage MOSFET (DTMOS) for Ultra- Low Voltage VLSI; IEEE TRANSACTIONS ON ELECTRON DEVICES, VOL. 44, NO. 3 MARCH 1997. 7. N. H. E. Weste and K. Eshraghian, Principles of CMOS VLSI Design:A Systems Perspective. Reading, MA: Addison-Wesley, 1993 8. Jagannath Samanta, Bishnu Prasad De, Banibrata Bag, Raj Kumar Maity, Comparative study for delay & power dissipation of CMOS Inverter in UDSM range; International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, Volume-1, Issue-6, January 2012. 9. A. Ghosh, D. Ghosh, —Optimization of Static Power, Leakage Power and Delay of Full Adder Circuit Using Dual Threshold MOSFET Based Design and T-Spice Simulationl IEEE Computer society, Advances in Recent Technologies in Communication and Computing, 2009, PP-903-905 10. Hamid Mahmoodi, Saibal Mukhopadhyay, Kaushik Roy, Estimation of DelayVariations due to Random-Dopant Fluctuations in Nanoscale CMOS Circuits IEEE JOURNAL OF SOLID-STATE CIRCUITS, VOL. 40, NO. 9, SEPTEMBER 2005 11. Yangang Wang, Michael Merrett and Mark Zwolinski, Statistical Power Analysis for Nanoscale CMOS 12. By Benton H. Calhoun, Yu Cao, Xin Li, Ken Mai, Lawrence T. Pileggi, Rob A. Rutenbar, Kenneth L. Shepard, Challenges and Opportunities in the Era of Nanoscale CMOS. | 83-87 |
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