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S. No	Volume-1 Issue-6, May 2013, ISSN: 2319–6386 (Online) Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.	Page No.
1.	**Authors:** Kashmira P. Jayakar, Y. B. Gurav **Paper Title:** Interactive Systems: The Review of Models and System Requirements	1-2

Abstract: In modern life, people tend to represent the world not merely in 2 dimension, more intuitive, realistic products were demanded. The technology of 3D visualization emerged as the times require. It was widely used in the field of urban planning, military command, and city simulation and so on. Many university, company and institute developed different kinds of 3D software. The disposal, modeling and visualization of 3D data are very important in the construction of digital earth. Now, one can get fine 3D model with software such as 3DMax and so on. But the 3D system is only perfect in visualization without any function of spatial analysis.

Keywords: 3D, city simulation, digital earth.

References:

1. Yingjun Sun, Ning Ding, Guangrong Hao, "The Research and Application of 2D and 3D Interactive System", Second International Conference on Information and Computing Science, published in IEEE Computer Society, 978-0-7695-3634, 2009
2. Xiao Lebin, "Study on integrated 3D GIS data model and spatial analysis based on raster structure frame", PHD Disertation of the Institute of Geographic Sciences and Natural Resources Research, CAS, 1999.
3. Lan Qiuping, Li Lijun, Yang Bo, "Application of Dynamic Response Technology between 2D gis and 3D Simulation", Journal of Geomatics, China, vol. 32, pp. 18 – 19, June, 2007.
4. Huang Jianxi, Guo Lihua, Long Yi, Wu Hehai, "Design and Implementation of Dynamic Response Mechanism between 2D Digital Map and 3D Visualization Scene", Journal of Geomatics, China, vol. 28, pp. 33 – 35, February, 2003.
5. Yin Wensheng, Dai Lihong, Li Shiqi, "2d and 3d Associated Virtual Reality Simulation System Based on MFC and Vega Software", Computer Simulation, China, vol. 22, pp. 210 – 211, May, 2005.
6. Liu Dongqin, Xu Wenzhong, Lin Zongjian, "The research and application of integrating the 2D GIS and 3D virtual GIS in digital city information", Science of Surveying and Mapping, China, vol. 31, pp. 53 – 54, January, 2007.
7. Xie Yilin, Wang Yunjia, "Research and Practice on realizing 3D GIS by Virtual Reality Scene", Engineering of Surveying and Mapping, China, Vol. 15, pp.43 – 46, December, 2006.

2.	**Authors:** Dhanashree M. Shirkey, S. R. Gupta **Paper Title:** An Image Mining System for Gender Classification & Age Prediction Based on Facial Features	3-7

Abstract: The face recognition system with large sets of training sets for personal identification normally attains good accuracy. In the project, we proposed algorithm for Feature Extraction based Face Recognition, Gender and Age Classification with only small training sets and it yields good results even with one image per person. This process involves three stages: Pre-processing, Feature Extraction and Classification. The geometric features of facial images like eyes, nose, mouth etc. are located by using Feature extraction algorithm and face recognition is performed. Based on the texture and shape information, gender and age classification is done by comparing histogram of the query image and the histogram of the images in dataset respectively. By using the proposed work , ratio of 100% for face matching, 90% for gender classification ,and 85% for age classification can be achieved.

Keywords: Face Detection, Skin Color Segmentation, Face Features extraction, Features recognization, Fuzzy rules, Histogram, Image mining.

References:

1. Edward D. Mysak, "Pitch duration characteristics of older males," Journal of Speech and Hearing Research, vol. 2, pp.46–54, 1959.
2. Sue E. Linville, Vocal Aging, Singular Publishing Group, SanDiego, CA; USA, 2001.
3. Christian M¨uller, Frank Wittig, and J¨org Baus, "Exploiting speech for recognizing elderly users to respond to their special needs," in Proc. Euro speech 2003, Geneva; Switzerland, Sept.2003, ISCA.
4. Nobuaki Minematsu, Mariko Sekiguchi, and Keikichi Hirose,"Automatic estimation of one's age with his/ her speech based upon acoustic modeling techniques of speakers," in Proc.ICASSP 2002, Orlando, FL; USA, May 2002, IEEE.
5. Izhak Shafran, Michael Riley, and Mehryar Mohri, "Voice signatures,"in Proc. ASRU 2003, U.S. Virgin Islands, Dec. 2003, IEEE.
6. Susanne Sch¨otz, "Automatic prediction of speaker age using CART," Term paper for course in Forensic Phonetics,G¨oteborg University
7. European Language Resources Association (ELRA), "http://www.speechdat.org/," http://www.elra.info/.
8. Jitendra Ajmera, "Effect of age and gender on LP smoothed spectral envelope," in Proc. Speaker Odyssey. 2006, IEEE.
9. Loredana Cerrato, Mauro Falcone, and Andrea Paoloni, "Subjective age estimation of telephonic voices," Speech Communication,vol. 31, no. 2–3, pp. 107–102, 2000.
10. The FG-NET Aging Database. http://www.fgnet.rsunit.com/.
11. Y. Fu, Y. Xu, and T. S. Huang. Estimating human age by manifold analysis of face pictures and regression on aging features. Proceedings of the IEEE Multimedia and Expo, pages 1383–1386, 2007.
12. G. Guo, G. Mu, Y. Fu, C. Dyer, and T. Huang. A study on automatic age estimation using a large database. International Conference on Computer Vision in Kyoto (ICCV 2009), pages 1986–1991, 2009.
13. A. E. Hoerl and R. W. Kennard. Ridge regression: Biased estimation for no orthogonal problems. Techno metrics, 12(3):55–67, 1970.
14. T. Kanamori, S. Hido, and M. Sugiyama. A least-squares approach to direct importance estimation. Journal of Machine Learning Research, 10:1391–1445, 2009.
15. K. J. Ricanek and T. Tesafaye. Morph: A longitudinal image database of normal adult age-progression. Proceedings of the

IEEE 7th International Conference on Automatic Face and Gesture Recognition (FGR 2006), pages 341–345, 2006.
16. B. Schoolkopf and A. J. Smola. Learning with Kernels, MIT Press, Cambridge, MA, USA, 2002.
17. H. Shimodaira. Improving predictive inference under covariate shift by weighting the log-likelihood function. Journal of Statistical Planning and Inference, 90(2):227–244, 2000.
18. M. Stone. Cross-valedictory choice and assessment of statistical predictions, Journal of the Royal Statistical Society, Series B, 36:111-147, 1974.

3.

Authors:	**Sreelal Elamana, A. Rathinam**
Paper Title:	**A Novel Approach to Interarea Oscillation Damping By Using Statcom-Smes System**

Abstract: Interarea oscillations create problems like damage of generators, increase line losses, and increase wear and tear on network components.STATCOM is capable of damping such oscillation and it reduces all the above mentioned problems due to interarea oscillations. In this paper a new controlling technique that uses combination of STATCOM-SMES system is discussed to damp inter area oscillations in an effective manner.

Keywords: Static Synchronous compensator (STATCOM), Super Conducting Magnetic Energy Storage Systems (SMES), Inter Area Oscillations.

References:

1. Y.-Y. Hsu, S.-W.Shyue, and C.-C. Su, "Low Frequency Oscillation inLongitudinal Power Systems: Experience with Dynamic Stability of Taiwan'sPower System," IEEE Trans. Power Systems, Vol. 2, No. 1, pp.92–100, Feb. 1987.
2. D. N. Koterev, C.W. Taylor, and W. A. Mittelstadt, "Model Validation forthe August 10, 1996 WSCC System Outage," IEEE Trans. Power Systems,Vol. 14, No. 3, pp. 967–979, Aug. 1999.
3. G. Rogers, Power System Oscillations, Kluwer, Norwell, MA, 2000
4. M. Mahdavian,G. Shahgholian,N. Rasti, "Modelling and Damping Controller Design for Static Synchronous Compensator,"IEEE ,978-1-4244-3388,2009.
5. S.Round, Q. Yu, et al, "Performance of a Unified Power Flow Controller Using a d-q Control System,"AC and DC Transmission Conference, April 1996.
6. N.G.Hingorani, L.Gyugyi, Understanding FACTS,|Concepts and Technology of Flexible AC Transmission Systems. IEEE press, 2000.
7. R.MohanMathur and R.K.Varma, "Thyristor based FACTS Controllers for Electrical Transmission System,"IEEE Series on Power Engineering, US, 2002.
8. S. Muthukrishnan,Dr. A.Nirmalkumar , G. Murugananth, "Modelling and Simulation Five Level Inverter based UPFC System," India International Journal of Computer Applications (0975 – 8887)Volume 12– No.11, January 2011.
9. R. D. Saxena, K. D. JoshiG. H. Raisoni, "Application of Unified Power Flow Controller (UPFC) for Damping Power System Oscillations – A Review,"International Journal of Engineering Research & Technology (IJERT) Vol. 1 Issue 4, June – 2012.
10. A. Kazemi and M.R. Shadmesgaran, "Extended Supplementary Controller of UPFC to Improve Damping Inter-Area Oscillations Considering Inertia Coefficient,"International Journal Of Energy, Issue 1, Vol. 2, 2008.
11. M.Thangavel, S.Shiny Jasmine, "Enhancement of Voltage Stability and Power Oscillation Damping Using Static Synchronous Series Compensator with SMES,"IJART, Vol. 2 Issue 3, 2012, 94-98.
12. Ravi Gupta, N K Sharma, P Tiwari, Astha Gupta, Nitisha Nigam, Anubha Gupta, "Application of energy storage devices in power systems,"International Journal of Engineering, Science and Technology,Vol. 3, No. 1, 2011, pp. 289-297.
13. S. Padma, Dr. R. Lakshmipathi, K. Ramash Kumar and P. Nandagopal, "A PI Controller for Enhancing the Transient Stability of Multi Pulse Inverter Based Static Synchronous Series Compensator (SSSC) With Superconducting Magnetic Energy Storage (SMES),"International Journal of Electrical and Electronics Engineering, 2010.
14. P. Kumkratug and M.H. Haque, "Improvement of Damping of A Power System By STATCOM,"IEEE Transactions On Circuits And Systems- 1: REGULAR PAPERS, VOL 55, and NO.3 APRIL 2009.
15. Dr.K.Vadirajacharya , "Super conducting Magnetic Energy Storage Based DVR,"International Journal of Engineering Research & Technology (IJERT), Vo3. 1 Issue 4, June – 2010.
16. D. Harikrishna1, N.V. Srikanth, Y. Chandrasekhar, "Improvement of Transient Stability Using Fuzzy Logic Controlled SMES,"Majlesi Journal of Electrical Engineering Vol. 5, No. 4, December 2011.
17. NuraddeenMagaji and M. W. Mustafa ,"Optimal Location of TCSC Device For Damping Oscillations,"MalaysiaARPN Journal of Engineering and Applied Sciences,VOL. 4, NO. 3, MAY 2009
18. Alberto D.Delrosso, Claudio A. Canizares and Victor M.Dona. "A study of TCSC controller Design for Power System Stability Improvement" IEEE Transactions on Power Systems,Feb, 2003, pp 1-10.
19. S.Panda, RamnarayanN.Patel. "Improving Power System Transient Stability with an off–CentreLocation of Shunt Facts Devices" Journal of Electrical Engg, vol 57, no 6, 2006, pp 365-368.
20. L Gyugyi, C D Schauder, S L Torgerson and A Edris."The Unified Power Flow Controller: A New Approach to Power Transmission Control." IEEE Transactions on Power Delivery, vol 10, no 2, 1995, p 1088.
21. P K Dash, S Mishra and G Panda. "Damping Multimodal Power System Oscillation using a Hybrid Fuzzy Controller for Series Connected Facts Devices", IEEE Transactions on Power Systems, vol15, no 4, November, 2000, p 1360.

8-12

Authors:	**A. S. Zadgaonkar, Vikas Chandra Pandey, Pratap Singh Pradhan**
Paper Title:	**Developing a Model to Enhance E-Mail Authentication against E-Mail Address Spoofing Using Application**

Abstract: E-mail is one of the most commonly used communication mechanisms. Most of the recipients and senders desire secure e-mail exchange. Senders want to make sure that the recipient is really the intended recipient, and the message arrives to the recipient confidentially. On the other hand, recipients want to make sure that the sender is the entity who it claims to be, and the arrived message has not been maliciously modified and examined during transmission. These requirements can be satisfied by the e-mail applications that use public key cryptosystem (PKC) as the security base, such as S/MIME and PGP. The main handicap behind the deployment of applications that use PKC is the problem of public key distribution with a legitimate binding with its owner. Moreover, public key management features, such as update, delete operations must be performed in a secure way.

Keywords: MIME, PKC, threats, attack, Internet, Spam, software.

4.	**References:** 1. M. Delany, "Domain-based email authentication using public-keys advertised in the DNS (DomainKeys)," RFC4870, IETF, May 2007. http://tools.ietf.org/html/ rfc4870 2. Mark Lentczner and Meng Weng Wong, "Sender Policy Framework (SPF) a Convention to Describe Hosts Authorized to Send SMTP Traffic," May 2004. http: //tools.ietf.org/html/draft-mengwong-spf-01 3. Yukiko Sawaya, Yutaka Miyake, "An Examination of Spam Mail Filtering with k-NN Analysis Based on Mail Header Information", The 2008 Symposium on Cryptography and Information Security (SCIS 2008), 3C2-1, 6pages, January 2008. 4. A. Bergholz, J.-H. Chang, G. Paaß, F. Reichartz, and S. Strobel. Improved phishing detection using model-based features. In Proceedings of the Conference on Email and Anti-Spam (CEAS), 2008. 5. http://en.wikipedia.org/wiki/E-mail_spoofing 6. http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci840262,00.html 7. http://en.wikipedia.org/wiki/Phishing 8. http://www.windowsecurity.com/whitepapers/25-Common-Mistakes-Email-Security.html 9. http://www.cert.org/tech_tips/email_spoofing.html 10. http://www.umt.edu/it/email/spoofing.aspx 11. http://www.ehow.com/list_5924278_disadvantages-pgpencryption_.html 12. http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci34 3029,00.html 13. http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nf b=true&_&ERICExtSearch_SearchValue_0=ED415834&ERICExtSearch_SearchType_0=no& accno=ED415834. 14. RFC 2821, Simple Mail Transfer Protocol, http://www.ietf.org/rfc/rfc2821.txt. 15. Aaron Emigh, Online Identity Theft: Technology, Chokepoints and Countermeasures. Report of the Department of Homeland Security – SRI International Identity Theft Technology Council, October 3, 2005. 16. Adida, B., Hohenberger, S., Rivest, R. Lightweight Encryption for Email. USENIX Steps to Reducing Unwanted Traffic on the Internet Workshop (SRUTI), 2005. 17. Anti-Phishing Working Group. Phishing Archive.http://www.antiphishing.org/phishing archive.html. 18. Anti-Phishing Working Group. Phishing activity trends report, June 2006.http://antiphishing.org/reports/apwg report june 2006.pdf, June 2006. 19. D. Birk, M. Dornseif, S. Gajek, and F. Grobert, "Phishing phishers—tracing identity thieves and money launderers," Horst Gortz Institute for IT Security, Ruhr University Bochum, Tech. Rep. TR-HGI-01-2006. 20. e-mail spoofing. internet.com, Dec 11 2003.Available from http://www.webopedia.com/TERM/E/e_mail_spoofing.html. 21. J. Callas, M. Delany, M. Libbey, J. Fenton, M. Thomas, "DomainKeys Identified Mail (DKIM)," Internet Draft draft-allman-dkim-base 01,http://mipassoc.org/dkim/specs/draftallman- dkim-base-01.txt, October 2005. 22. L. Cranor, S. Egelman, J. Hong, and Y. Zhang.Phinding phish: An evaluation of anti phishing toolbars. Technical report, Carnegie Mellon University, Nov. 2006. 23. Fette, N. Sadeh, and A. Tomasic. Learning to Detect Phishing Emails. In Proceedings of the International World Wide Web Conference (WWW), Banff, Alberta, Canada, May 2007. 24. Garera, S., Provos, N., Rubin, A.D., Chew, M. A Frameword for Detection and Measurement of Phishing Attacks. In Proceedings of the 2007 ACM workshop on Recurring malcode, pages 1-8, 2007. 25. Jacobsson, M., & Myers, S. (2007). Phishing and Countermeasures - Understand the Increasing Problem of Electronic Identity Theft. New Jersey: Wiley.	**13-17**
5.	**Authors:** **Sundaram Arvind Narayan, Sutha Shobana** **Paper Title:** **Characteristics and Thermal Efficiency of Biofuels: Rubber Seed Oil as a Renewable Energy Source** **Abstract:** Biodiesel, Fatty Acid Methyl Esters are alternative diesel fuels. Generally they obtained from renewable bio–sources, chiefly rubber seed oil which is extracted from rubber seeds (Heavea braziliensis) and is the one with significant potential. In this presentation, the fuel characteristics and thermal efficiency of biodiesel (BD100), diesel (BD00) and a blend of five percent biodiesel (BBD5) by volume of diesel were studied with their performance and the emissions of blend of five percent biodiesel (BBD5) which was comparable to diesel. It is a pattern of research, basic for the development of other bio sources as well. **Keywords:** Biodiesel, Heavea braziliensis, Fuel characteristics, Thermal efficiency. **References:** 1. A. O. Guimaraes, F. A. L. Machado, E. C. da Silva, A. M. Mansanares, "Investigating Thermal Properties of Biodiesel/Diesel Mixtures using Photopyroelectric Technique", Thermochimica Acta, (2012) 527: 125–130. 2. S. A. Narayan, S. Shobana, A. Sundaram, J. Dharmaraja, Isolation, Spectral Characterization, Thermal efficiency and Microbial Evaluation studies on Indian Rubber (Hevea braziliensis) Seed Oil. International Journal of Recent Technology and Engineering, (2013) 1:143–147. 3. R.R. Shrawankar, S. K. Bhele , Preparation Of Biodiesel From Various Non Edible Oil Seeds and Its Characterization, Golden Research Thoughts, (2012) 2: 1–7. 4. M. M. Gui, K. T. Lee and S. Bhatia, "Feasibility of edible oil versus non-edible oil versus waste edible oil as biodiesel feedstock", Energy, vol. 33, Nov. 2008, pp. 1646–1653. 5. A. S. Ramadhas, S. Jayaraj, C. Muraleedharan, Use of vegetable oils as I.C. engine fuels–a review, Energy, (2005) 30: 1789–1800. 6. A. S. Ramadhas, S. Jayaraj, C. Muraleedharan, Characterization and effect of using rubber seed oil as Fuel in the compression Ignition Engines, Journal of Analytical and Applied Pyrolysis, (2005) 71: 987–996.	**18-20**
	Authors: **Ankit Patel, Hetal Patel** **Paper Title:** **Face Mosaicing using Multiresolution Spline: A Review** **Abstract:** Image Mosaicing is the act of combining two or more images. It may containe images such that no obstructive boundary exists around overlapped regions. Emphasis is given on to create a mosaic image that contains as little distortion as possible from the original images, as well as preserving the general appearance of the original images. We describe a face mosaicing scheme that generates a composite face image during enrollment based on the evidence provided by frontal and semiprofile face images of an individual. In the this scheme, the side profile images are aligned with the frontal image using a simple registration algorithm, which determine the transformation relating the two	

6.	images. Multiresolution splining is then used to blend the side profiles with the frontal image, thereby generating a composite face image of the user. Experiment conducted on a CMU pose, illumination, expression (CMU PIE) database indicate that face Mosaicing, as described in this paper , offers significant benefits by accounting for the pose variations that are commonly observed in face images. **Keywords:** Face Mosaicing, Face Recognition, Gaussian & Laplacian Pyramids, Multiresolution. **References:** 1. Matthew A. Turk, Alex P. Pentland, "Face Recognition Using Eigen faces," Proc. IEEE Conference on Computer Vision and Pattern Recognition: 586–591. 1991. 2. M.-H. Yang, D. Kriegman, and N. Ahuja." Detecting faces in images: A survey". IEEE Transactions on Pattern Analysis and Machine Intelligence, 24(1):34–58, January 2002. 3. X. Zhang*, Y. Gao,, "Face Recognition across pose: A review". ELSEVIER transaction on pattern recognition 42(2009) 2876-2896 4. M. Kirby and L. Sirovich. "Application of the karhunen-loeve procedure For the characterization of human faces". IEEE Transactions on Pattern Analysis and Machine Intelligence, 12(1):103–108, 1990. 5. M.K. Neharkar,Prof. S. K. Sudhansu, DR. Veeresh G.K., "Multiresolution mosaic images by using laplacian of gaussian method: A Review" Intrnational jouranal of engineering research and applications, vol.2, Issue 2, Mar-Apr 2012, PP. 020-025. 6. W. Zhao, R. Chellappa, A. Rosenfeld, and P. J. Phillips, "Face recognition: A literature survey," ACM comput serv., vol. 35, no. 4, pp. 399–458, 2003. 7. N. K. Ratha, J. H. Connell, and R. M. Bolle, "Image mosaicing for rolled fingerprint construction," in Proc. Int. Conf. Pattern Recog., Aug. 1998, vol. 2, pp. 1651–1653. 8. A. Jain and A. Ross, "Fingerprint mosaicking," in Proc. Int. Conf. Acoust., Speech, and Signal Process., May 2002, vol. 4, pp. 4064–4067.. 9. T. Sim, S. Baker, and M. Bsat, "The CMU pose, illumination, and expression database," IEEE Trans. Pattern Anal. Mach. Intell., vol. 25, no. 12, pp. 1615–1618, Dec. 2003. 10. Richa Singh, Mayank Vatsa, Arun Ross,and Afzel Noore, " A Mosaicing Scheme for Pose-Invariant Face Recognition",IEEE Trans On Systems, Man, And Cybernetics-Part B: October 2007 11. X. Liu and T. Chen, "Geometry-assisted statistical modeling for face mosaicing," in Proc. IEEE Int. Conf. Image Process., Sep. 2003, vol. 2, pp. 883–886. 12. R.Singh, M. Vatsa, A. Ross, and A. Noore, "Performance enhancement of 2D face recognition via Mosaicing", in Proc. 4th IEEE Workshop Autom. Identification Adv. Technol., 2005, pp. 63–68. 13. F.Yang, M. Paindavoine, H. Abdi, and A. Monopoly, "Development of a fast panoramic face mosaicing and recognition system", Opt. Eng., vol. 44, no. 8, pp. 087 005/1–087 005/10, 2005. 14. P. J. Burt and E. H. Adelson, "A multiresolution spline with application to image mosaics," ACM Trans. Graph., vol. 2, no. 4, pp. 217–236, 1983. 15. S. Periaswamy and H. Farid, "Elastic registration in the presence of intensity variations," IEEE Trans. Med. Imag., vol. 22, no. 7, pp. 865–874, Jul. 2003. 16. D. Hill, C. Studholme, and D. Hawkes, "Voxel similarity measures for automated image registration," in Proc. 3rd SPIE Conf. Vis. Biomed. Comput., 1994, pp. 205–216. 17. F. Maes, A. Collignon, D. Vandermeulen, G. Marchal, and P. Suetens, "Multimodality image registration by maximization of mutual information," IEEE T rans. Med. Imag., vol. 16, no. 2, pp. 187–198, Apr. 1997. 18. S. Chen, X. Tan, Z.-H. Zhou, F. Zhang, "Face recognition from a single image per person: a survey", Pattern Recognition 39 (9) (2006) 1725–1745. 19. H. Kang, T. F. Cootes, and C. J. Taylor, "A comparison of face verification algorithms using appearance models," in Proc. Brit. Mach. Vis. Conf., 2002, vol. 2, pp. 477–486. 20. V. Blanz, S. Romdhami, and T. Vetter, "Face identification across different poses and illuminations with a 3-D morphable model," in Proc. Int. Conf. Autom. Face and Gesture Recog., May 2002, pp. 202–207. 21. K. I. Chang, K. W. Bowyer, and P. J. Flynn, "An evaluation of multimodal 2D+3D face biometrics," IEEE Trans. Pattern Anal. Mach. Intell., vol. 27, no. 4, pp. 619–624, Apr. 2005. 22. U. Uludag, A. Ross, and A. K. Jain, "Biometric template selection and update: A case study in fingerprints," Pattern Recognit., vol. 37, no. 7, pp. 1533–1542, 2004. 23. Minh N. Doy and Martin Vetterliyx, "Frame reconstruction of the Laplacian pyramid‖", IEEE Transactions, Nov 2001. 24. D. Valentin, H. Abdi, A.J. O'Toole and G.W. Cottrell, "Connectionist models of face processing: A survey", Pattern Recognition, Vol.27, 1208- 1230, 1994. 25. H. Abdi, A generalized approach for connectionist auto-associative memories: interpretation, implications and illustration for face processing. In J. Demongeot (Ed.), Artificial Intelligence and Cognitive Sciences. Manchester: Manchester University Press, (1988). 26. Ming Shing Su, Wen-Liang Hwang and Kuo-Young Cheng, "Analysis of Image Mosaics", ACM Transactions, July 2004. 27. Chiou Ting Hsu and Ja-Ling Wu, ―Multiresolution Mosaic‖, IEEE Transactions, Nov 1996. 28. Nadege Rebiere, Marie-Flavie, Auclair-Fortier, ―Image Mosaicing using Local Optical Flow Registration‖, IEEE Transactions, August 2008. 29. Guosheng Yang, Huanlong Zhang, YuLin Yang, ―Study of Image Mosaic Based on the Method of Finite Difference‖, IEEE Transactions, Augest 2008. 30. C. Victoria Priscilla, B. Poornima, "Image registration & Nose detection using affine transformation" Int.J.Computer Technology & Applications ,Vol 4 (2),209-216.	**21-25**
	Authors:	**Vinod Kumar K, Jatin Das D**
	Paper Title:	**Advanced Detecting and Defensive Coding Techniques to prevent SQLIAs in Web Applications: A Survey**
	Abstract: SQL injection attacks are more dangerous than other web attacks because these attacks can get sensitive data stored in the database by manipulating the original SQL queries. In spite of different tools and frameworks to detect and prevent SQL Injection, it is still a top most threat to web applications. In this paper, we provide detailed survey of different coding techniques along with recent trends in detecting and preventing SQLIAs' that can be used to develop secured web applications. **Keywords:** Web applications, SQL Injections. **References:**	

1. https://www.owasp.org/index.php/Category:OWASP_Top_Ten_Project.
2. Justin Clarke, “SQL Injection Attacks ” 2nd Edition,2012.
3. Zelong Yin, Zhen Niu and Feifan Tong (2013,March,13-15). The Design of SQL Injection Analysis System based on Honeynet .VOL-I. Available: http://www.iaeng.org/publication/IMECS2013/IMECS2013_pp403-406.pdf
4. Tiffany Bao, Steve Matsumoto, JD Nir (2013,March,31). Preventing SQL Injection with Input Rectification Available: http://18739c.ece.cmu.edu/bravo-2/wp-content/uploads/sites/9/2013/03/report.pdf
5. Fan Long Ganesh, Carbin, Rinard,”Automatic Input rectification”,IEEE Conf. on Software Engineering,June-2012,pp.80-90.
6. Shaimaa Ezzat Salama, Mohamed I. Marie, Laila M. El-Fangary & Yehia K. Helmy ,” Web Anomaly Misuse Intrusion Detection Framework for SQL Injection Detection “, IJACSA ,vol.3,2012,pp.123-129
7. Shar, L. K. and Tan, H. B. K .(2012). Mining input sanitization patterns for predicting SQL injection and cross site scripting vulnerabilities. Available : http://dl.acm.org/citation.cfm?id=2337399
8. S.Avireddy, ” Random4: An application Specific Randomized Encryption Algorithm to prevent SQL injection” IEEE conf. Trust, Security and Privacy,2012,June,pp.1327-1333.
9. Inyong Lee, Soonki Jeong, Sangsoo Yeo, Jongsub Moon ,” A novel method for SQL injection attack detection based on removing SQL query attribute values” .ELSEVIER Trans. On Mathematical and Modelling, 2011,pp58-68.
10. Indrani Balasundaram, E.Ramaraj,”An Authentication Scheme for Preventing SQL injection Attack using Hybrid Encryption” (ISSN 1450-216,2011, Vol.53,pp.359-368.
11. Allen Pomeroy and QingTan ,"Effective SQL Injection Attack Reconstruction Using Network Recording” IEEE Conf. on Computer and Information Technology, Sept.2,2011,pp.552-556.
12. P. Bisht, P. Madhusudan, and V. N. Venkatakrishnan ,”Dynamic Candidate Evaluations Approach to prevent SQL injection” ACM Trans. Inf. Syst. Secure., 13(2):1–39, 2010.
13. Raju Halder and Agostino Cortesi,” Obfuscation-based Analysis of SQL Injection Attacks”,IEEE Conf. On Computers and Communication- Italy,June,2010,pp.931-938. Digital Object Identifier : 10.1109/ISCC.2010.5546750
14. Michelle Ruse, TanmoySarkar, Samik Basu,” SQL injection Detection via Automatic Test Case Generation of Programs”, IEEE conf. on Application and the Internet,July,2010,pp.31-37.
15. Ezumalai, G. Aghila, “Combinatorial Method for Preventing SQL Injection Attacks”, IEEE Conf. on Advance Computing, March 2009.
16. M. Junjin,” An Approach for SQL Injection Vulnerability Detection- AMNeSIA”,IEEE Conf. on Information technology,April,2009,pp.1411-1414.
17. https://www.owasp.org/index.php/SQL_Injection_Prevention_Cheat_Sheet,Dec-2012
18. http://www.sans.org/top25-software-errors/

7. **26-31**

Authors: **R. V. Wanjari, T. C. Parshiwanikar**

Paper Title: **Design and Analysis of Camshaft by Changing Parameters which Causes Failure**

Abstract: Camshaft can be defined as a machine element having the curve outlined or a curved grooved, gives the predetermined specified motion to another element called the follower. In automotive field, Camshaft and its follower take importance roles to run the engine. Nowadays the car maker have developed the vary schemes of cam profile to match with the engine performance. Since the system deals with high load and high speed and many analyses have been carried out on the failure of the components. The analysis is done either by experimental or finite element analysis. The result from the finite element analysis is an approximate of the component failure. In the mean time, the software development is improving in this few decades. This project aim determines the stress concentration on the cam and followers during normal operation. More over, this project used the camshaft used in Tata safari dicor 2.2L engine in type. Pro-E wildfire 5.0 and Ansys software are used for determination of stress concentration on the components.. In the analysis, the typical values for coefficient of friction, materials, and spring rate are used. The result from finite element analysis showed that the maximum stress concentration occurred at camshaft that leads to the failure of the component. Value for maximum stress is over the allowable stress or rocker arm material. Other components are approximately safe where the maximum stress is not over the allowable stress for components.

Keywords: Cams and followers; engine speed; failure of camshaft; materials; valves.

8. **32-34**

References:

1. "Camshaft definition by Merriam-Webster". Merriam-webster.com. 2010-08-13. Retrieved 2010-11-07.
2. R.S. Khurmi and J.K. Gupta. “Machine Design”, a division of S. Chand & Co. Ltd. p.514-515.
3. Magnus Hellstr¨om. “Engine Speed Based Estimation of the Indicated Engine Torque”, Reg nr: LiTH-ISY-EX-3569-2005 16th February 2005.
4. R. ˙Ipek, B. Selcuk ,“The dry wear profile of camshaft” Journal of Materials Processing Technology 168 (2005) 373–376
5. W.A. Glaeser and S.J. Shaffer, B a t t e l l e Laboratories “contact fatigue”, ASM Handbook, Volume 19: Fatigue and Fracture, ASM Handbook Committee, p 331-336
6. “Physics Digest- Part 1”, Navneet Publication

Authors: **A. S. Zadgaonkar, Pooja Agrawal, Anju Lata Rathore**

Paper Title: **Developing an Algorithm to Implement Efficient Intrusion Detection System using Soft Computing**

Abstract: During last decades information technologies based on the computer networks play an important role in various spheres of human activity. Information has become the organizations most precious asset. Organizations have become increasingly dependent on the information since more information is being stored and processed on network-based systems. The widespread use of e-commerce has increased the necessity of protecting the system to a very high extent. Problems of great importance are entrusted on them, such as keeping, transmission and automation of information processing. The security level of processed information can vary from private and commercial to military and state secret.

Keywords: Information, Organizations, Commercial, Security, Internet, Automation.

References:

1. M. Botha, R. Solms, "Utilizing Neural Networks For Effective Intrusion Detection", ISSA, 2004.
2. R. Graham, "FAQ: Network Intrusion Detection Systems". March 21, 2000.
3. D. Zamboni, "Using Internal Sensors For Computer Intrusion Detection". Center for Education and Research in Information Assurance and Security, Purdue University. August 2001.
4. K. Scarfone, P. Mell, "Guide to Intrusion Detection and Prevention Systems (IDPS)". Computer Security Resource Center (National Institute of Standards and Technology). February 2007.
5. A. Chittur, "Model Generation for an Intrusion Detection System Using Genetic Algorithms". January 2005.
6. W. Li, "Using Genetic Algorithm for Network Intrusion Detection". "A Genetic Algorithm Approach to Network Intrusion Detection". SANS Institute, USA, 2004.
7. W. Lu, I. Traore, "Detecting New Forms of Network Intrusion Using Genetic Programming". Computational Intelligence, vol. 20, pp. 3, Blackwell Publishing, Malden, pp. 475-494, 2004.
8. M. M. Pillai, J. H. P. Eloff, H. S. Venter, "An Approach to Implement a Network Intrusion Detection System using Genetic Algorithms", Proceedings of SAICSIT, pp:221-228, 2004.
9. S. M. Bridges, R. B. Vaughn, "Fuzzy Data Mining And Genetic Algorithms Applied To Intrusion Detection", Proceedings of 12th Annual Canadian Information Technology Security Symposium, pp. 109-122, 2000.
10. J. Gomez, D. Dasgupta, "Evolving Fuzzy Classifiers for Intrusion Detection", Proceedings of the IEEE, 2002.
11. M. Middlemiss, G. Dick, "Feature selection of intrusion detection data using a hybrid genetic algorithm/KNN approach", Design and application of hybrid intelligent systems, IOS Press Amsterdam, pp.519-527, 2003.
12. Srinivas Mukkamala, Andrew H. Sung, Ajith Abraham, "Intrusion detection using an ensemble of intelligent paradigms", Journal of Network and Computer Applications, Volume 28, Issue 2, April 2005, Pages 167-182
13. S. Peddabachigari, Ajith Abraham, C. Grosan, J. Thomas, "Modeling intrusion detection system using hybrid intelligent systems", Journal of Network and Computer Applications, Volume 30, Issue 1, January 2007, Pages 114–132
14. M. Saniee Abadeh, J. Habibi, C. Lucas, "Intrusion detection using a fuzzy genetics-based learning algorithm", Journal of Network and Computer Applications, Volume 30, Issue 1, January 2007,Pages 414-428
15. Tao Peng, C. Leckie, Kotagiri Ramamohanarao, "Information sharing for distributed intrusion detection systems", Journal of Network and Computer Applications, Volume 30, Issue 3, August 2007, Pages 877–899
16. M. Crosbie, E. Spafford, "Applying Genetic Programming to Intrusion Detection", Proceedings of the AAAI Fall Symposium, 1995.
17. T. Xia, G. Qu, S. Hariri, M. Yousif, "An Efficient Network Intrusion Detection Method Based on Information Theory and Genetic Algorithm", Proceedings of the 24th IEEE International Performance Computing and Communications Conference (IPCCC '05), Phoenix, AZ, USA. 2005.
18. Anup Goyal, Chetan Kumar, "GA-NIDS: A Genetic Algorithm based Network Intrusion Detection System", 2008.
19. R. H. Gong, M. Zulkernine, P. Abolmaesumi, "A Software Implementation of a Genetic Algorithm Based Approach to Network Intrusion Detection", 2005.
20. B. Abdullah, I. Abd-alghafar, Gouda I. Salama, A. Abd-alhafez, "Performance Evaluation of a Genetic Algorithm Based Approach to Network Intrusion Detection System", 2009.
21. A. Sung, S. Mukkamala, "Identifying important features for intrusion detection using support vector machines and neural networks" in Symposium on Applications and the Internet, pp. 209– 216. 2003.
22. J. P. Planquart, "Application of Neural Networks to Intrusion Detection", SANS Institute Reading Room.
23. R. G. Bace, "Intrusion Detection", Macmillan Technical Publishing. 2000.
24. S. Kumar, E. Spafford, "A Software architecture to Support Misuse Intrusion Detection" in The 18th National Information Security Conference, pp. 194-204. 1995.
25. K. Ilgun, R. Kemmerer, P. A. Porras, "State Transition Analysis: A Rule-Based Intrusion Detection Approach", IEEE Transaction on Software Engineering, 21(3):pp. 181-199. 1995.
26. S. Kumar, "Classification and Detection of Computer Intrusions", Purdue University, 1995.
27. V. Bobor, "Efficient Intrusion Detection System Architecture Based on Neural Networks and Genetic Algorithms", Department of Computer and Systems Sciences, Stockholm University / Royal Institute of Technology, KTH/DSV, 2006.
28. KDD-CUP-99 Task Description; http://kdd.ics.uci.edu/databases/kddcup99/task.html
29. KDD Cup 1999: Tasks; http://www.kdd.org/kddcup/index.php?section=1999&method=task
30. KDD Cup 1999: Data; http://www.kdd.org/kddcup/index.php?section=1999&method=data
31. Results of the KDD'99 Classifier Learning Contest; http://cseweb.ucsd.edu/~elkan/clresults.html
32. H. G. Kayacık, A. N. Zincir-Heywood, M. I. Heywood, "Selecting Features for Intrusion Detection: A Feature Relevance Analysis on KDD 99 Intrusion Detection Datasets", May 2005.
33. G. Folino, C. Pizzuti, G. Spezzano, "GP Ensemble for Distributed Intrusion Detection Systems". ICAPR 54-62, 2005.
34. Sectools.Org: 2006 Results; http://sectools.org/tools2006.html
35. SecTools.Org: Top 125 Network Security Tools; http://sectools.org/tag/ids/
36. Snort (software); http://en.wikipedia.org/wiki/Snort_%28software%29
37. InfoWorld, The greatest open source software of all time, 2009; http://www.infoworld.com/d/open-source/greatest-open-source-software-all-time- 776?source=fssr
38. Suricata (software); http://en.wikipedia.org/wiki/Suricata_(software)
39. The Bro Network Security Monitor; http://bro-ids.org/

9. **35-39**

Authors:	**Mitesh Shah, Hetal Patel**
Paper Title:	**Design of a New Video Compression Algorithm Using Accordion Function**

Abstract: Among all multimedia applications, transmission of video frames requires large bandwidth and more bytes for storage. To reduce transmission bandwidth and storage memory, video compression is necessary. In this paper our focusing on reducing the storage space for video signal. The proposed technique compresses the video by reducing the spatial, spectral and temporal redundancies of the input video. The temporal redundancy is mainly depending on the co-relation between successive video frames. This redundancy was removed using Accordion function [1]. The accordion function converts the temporal redundancy into the spatial redundancy, which was removed using Discrete Cosine Transform (DCT). The Compression Ratio (CR) achieved for different real time videos was vary from 10 to 30. The CR was found more for those videos having less motion and vice- versa. The values of PSNR was found to be varied between 140 to 155 for different video inputs, while the MSE was varied between 0 to 2.5 for different video inputs.

Keywords: Accordion, Compression Ratio (CR), Peak Signal to Noise Ratio (PSNR), Mean Signal

Keywords: Road Accident, Road Safety Audit, Black Spot, Socio-Economic Cost.

References:

1. "IRC: SP 88-2010, Manual of Road Safety Audit", Indian Road Congress, November 2010.
2. "Road Accidents in India", Government of India, Ministry of Road Transport and Highways, transportation wing, New Delhi, June 2012.
3. Dr Sarin S.M and Dr Mittal N, "Road Safety Audit? Frequently Asked Questions", Indian Highways, March 2005
4. "Status Paper on Road Safety in India", India 2010 status paper, National Conference On recent trends in Engineering and Technology, B.V.M Engg college, May 13-14 2011.
5. Dr Kadiyali L.R, "Traffic Engineering and Transportation Planning" Khanna Publishers, Ninth Print, 2011
6. "Road Accident Scenario", 2nd para, News agency of Nigeria, November 18 2012.
7. "National Highway Classification", National Highway Development Project (NHDP), NHAI, Ministry of Road Transport, Government of India, January 2012
8. Dr. Sanjay Kumar Singh and Ashish Mishra "Road Accident Analysis: A case study of Patna City", Urban Transportation Journal, 60-75 page
9. B.Srinivas Roa, E Madhu, Santosh Jaljihal and T.S.Reddy, "Accident Study on NH-5 between Anakapalli to Vishkhapatnam" Proceedings of the Eastern Asia Society for Transportation Studies, Vol.5.pp.1973-1988,2005.

13.

Authors: **Surya Mani Sharma**

Paper Title: **Multi Functional Autonomous Robotic System (MARS)**

Abstract: Implementation of robots for hazardous tasks and in diverse field of exploration and production is not a new thing to today's world. Robots have travelled to farthest distance of universe to heights of sky due to their resistance capability. Today robots have been used in place of humans in order to minimize the project cost and recourse requirement. The following project aims to perform multiple robotic tasks with the help of two units which are linked to each other. This system is capable to perform aerial surveillance and ground investigation. Aerial unit performs the task usually done by today's [1] UAV. This paper To develop a autonomous intelligent robotic system capable of doing ground and aerial surveillance, able in recognizing and tracking various objects, can work in hazardous situations also is capable of remote controlling from any part of world .

Keywords: UAV, autonomous intelligent robotic.

56-58

References:

1. Aber, J. S., Marzolff, I., Ries, J. B., 2010. Small-format aerial photography – Principles, techniques and geoscience applications. Elsevier, Amsterdam
2. Bendea, H., Chiabrando, F., Giulio Tonolo, F., Marenchino, D., 2007. Mapping of archaeological areas using a low-cost UAV the Augusta Bagiennorum test site. In: Proceedings of the XXI International CIPA Symposium, XXI International CIPA Symposium, 01-06 October 2007, Athens, Greece.
3. Eisenbeiss, H., 2004. A mini Unmanned Aerial Vehicle (UAV): System overview and image acquisition. In: The International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVI-5/W1, International Workshop on Processing and Visualization using High Resolution Imagery, 18-20 November 2004, Pitsanulok, Thailand.
4. Gruen, A., Eisenbeiss, H., Blaha, M., Sauerbier, M., Fux, P., 2010. UAV Photogrammetry Project Drapham Dzong, Bhutan. SLSA-Jahresbericht 2009, SLSA, Zürich, Switzerland, pp. 61-70.
5. Paparazzi: paparazzi.enac.fr/wiki/Main_Page (accessed 20 July, 2011)

14.

Authors: **Surya Mani Sharma, Yugal Verma, Kartik Sekar**

Paper Title: **Unmanned Aerial Vehicle (UAV)**

Abstract: The research work in this paper aims to develop an unmanned aerial vehicle equipped with modern technologies various civil military applications. The [1] Unmanned Aerial Vehicle (UAV) market is expected to grow dramatically by 2020, as military, civil and commercial applications continue to develop. Potential changes in air traffic management include the creation of an information management system to exchange information among Air Traffic Management users and providers, the introduction of [2] 4-D navigation, and the development of alternative separation procedures. The impact of each scenario on the future air traffic and surveillance is summarized, and associated issues identified. The paper concludes by describing the need for a UAV roadmap to the future. This paper aims to provide a simple and low-cost solution of an autonomous aerial surveyor, which can do aerial surveillance, recognize and track various objects, able in making simple 3d map of place.

Keywords: UAV, Navigation.

59-62

References:

1. Aber, J. S., Marzolff, I., Ries, J. B., 2010. Small-format aerial photography – Principles, techniques and geoscience applications. Elsevier, Amsterdam
2. Bendea, H., Chiabrando, F., Giulio Tonolo, F., Marenchino, D., 2007. Mapping of archaeological areas using a low-cost UAV the Augusta Bagiennorum test site. In: Proceedings of the XXI International CIPA Symposium, XXI International CIPA Symposium, 01-06 October 2007, Athens, Greece.
3. Eisenbeiss, H., 2004. A mini Unmanned Aerial Vehicle (UAV): System overview and image acquisition. In: The International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVI-5/W1, International Workshop on Processing and Visualization using High Resolution Imagery, 18-20 November 2004, Pitsanulok, Thailand.
4. Gruen, A., Eisenbeiss, H., Blaha, M., Sauerbier, M., Fux, P., 2010. UAV Photogrammetry Project Drapham Dzong, Bhutan. SLSA-Jahresbericht 2009, SLSA, Zürich, Switzerland, pp. 61-70.
5. DIYDrones: www.diydrones.com (accessed 20 July, 2011) MatrixPilot: code.google.com/p/gentlenav/ (accessed 20 July,2011)

6. Microsoft Image Composite Editor manual: research.microsoft.com/en-us/um/redmond/groups/ivm/ice (accessed 25 September, 2011)

15.	**Authors:**	**A. S. Zadgaonkar, Suresh Kashyap, Murari Chandra Patel**
	Paper Title:	**Developing a Model to Detect E-mail Address Spoofing using Biometrics Technique**

Abstract: Email changed the way we communicate in today's highly technical world. Its usage increased tremendously in the last few years and millions of user's world wide joined this technological revolution that made the world look so small and at our disposal. The widespread use of email caused the number of warnings being made about the dark side our technological revolution to increase and we are becoming uniquely vulnerable to many mysterious and malicious threats. Viruses, worms, and other forms of malicious software started targeting our email inboxes to propagate. Spam and other forms of unsolicited bulk electronic commerce started filling our email inboxes and invading our privacy. Phishing and other forms of fraud attacks have been using email as their primary communication channel to trick users into giving out their credentials. Email could have been a killer application for the Internet if none of the problems mentioned above exist.

Keywords: Threats. Viruses, worms, Security, Internet, Email.

References:

1. S. Abu-Nimeh, D. Nappa, X. Wang, and S. Nair. A comparison of machine learning techniques for phishing detection. In Proceedings of the eCrime Researchers Summit, 2007.
2. Anti-Phishing Working Group. Phishing activity trends - report for the month of December 2007, 2008. http://www.antiphishing.org/reports/apwg report oct 2007.pdf, accessed on 28.04.08.
3. Bank Austria. Faq mobile TAN, 2008. http://www.bankaustria.at/de/19825.html, accessed on 25.01.08.
4. A. Bergholz, J.-H. Chang, G. Paaß, F. Reichartz, and S. Strobel. Improved phishing detection using model-based features. In Proceedings of the Conference on Email and Anti-Spam (CEAS), 2008.
5. B. Biggio, G. Fumera, I. Pillai, and F. Roli. Image spam filtering using visual information. In ICIAP '07: Proceedings of the 14th International Conference on Image Analysis and Processing, pages 105–110, Washington, DC, USA, 2007. IEEE Computer Society.
6. D. M. Blei, A. Y. Ng, and M. I. Jordan. Latent Dirichlet allocation. Journal of Machine Learning Research, 3:993–1022, 2003.
7. A. Bratko, G. V. Cormack, B. Filipic, T. R. Lynam, and B. Zupan. Spam filtering using statistical data compression models. Journal of Machine Learning Research, 6:2673–2698, 2006.
8. L. Breiman. Random forests. Machine Learning, 45(1):532, 2001.
9. B. Byun, C.-H. Lee, S.Webb, and C. Pu. A discriminative classifier learning approach to image modeling and spam image identification. In CEAS 2007 Fourth Conference on Email and Anti-Spam, August 2-3, 2007, Mountain View, California USA, 2007.
10. R. Cattoni, T. Coianiz, S. Messelodi, and C. Modena. Geometric layout analysis techniques for document image understanding: a review. Technical report, IRST, Trento, Italy, 1998.
11. M. Chandrasekaran, K. Narayanan, and S. Upadhyaya. Phishing email detection based on structural properties. In Proceedings of the NYS Cyber Security Conference, 2006.
12. Commtouch. Commtouch q3 spam statistics: Spam problem reaches new peak, expands in every dimension, 2008. http://www.commtouch.com/Site/News Events/pr content.asp?news id=767&cat id=1, accessed on 11.05.08.
13. G. V. Cormack and R. N. Horspool. Data compression using dynamic markov modelling. The Computer Journal, 30(6):541–550, 1987.
14. R. Dhamija, J. D. Tygar, and M. Hearst. Why phishing works. In Proceedings of the SIGCHI conference on Human Factors in Computing Systems, pages 581–590, 2006.
15. A. Emigh. Phishing attacks: Information flow and chokepoints. In M. Jakobsson and S. Myers, editors, Phishing and Countermeasures, pages 31–64. Wiley, 2007.
16. I. Fette, N. Sadeh, and A. Tomasic. Learning to detect phishing emails. Technical report, School of Computer Science Carnegie Mellon University, CMU-ISRI-06-112, 2006.
17. I. Fette, N. Sadeh, and A. Tomasic. Learning to detect phishing emails. In Proceedings of the International World Wide Web Conference (WWW), pages 649–656, 2007.
18. G. Fumera, I. Pillai, and F. Roli. Spam filtering based on the analysis of text information embedded into images. Journal of Machine Learning Research, 7:2699–2720, 2006.
19. Gartner. Gartner survey shows phishing attacks escalated in 2007; more than $3 billion lost to these attacks. http://allpaynews.com/node/3820 retrieved on April 27th, 2008, 2007.
20. J. Goodman, G. V. Cormack, and D. Heckerman. Spam and the ongoing battle for the inbox. Communications of the ACM, 50:25–33, 2007.
21. M. Gupta. Spoofing and coutermeasures. In M. Jakobsson and S. Myers, editors, Phishing and Countermeasures, pages 65–104. Wiley, 2007.

63-65

	Authors:	**Shreya Kaushal, Surbhi Sharma**
	Paper Title:	**A 2x2 FPGA based WRAP Tested for Colored Image Transmission in MIMO Systems**

Abstract: The paper deals with the utilization of MATLAB for simulation and analysis of the colored image transmission over multiple input multiple outputs (MIMO). In the proposed algorithm, we applied source coding scheme with convolution channel coding as well as space-time block coding techniques, associated with QAM modulation method, to improve colored image transmission performance. The data obtained from the colored image is encoded using STBC based on Alamouti transmitter diversity scheme in which we have used two transmitter antennas and two receiving antenna and two transmitter and one receiver also. The transmission is done with the help of Rayleigh fading and AWGN channel. With the availability of high data rates by MIMO channel. Images can be transmitted with high reliability. Simulation results show the the quality of the reconstructed image can be significantly improved over only using space time coding. The comparison has been done on the basis of quality of reproduced image by measuring image PSNR based on SNR and BER value for different system model is realized over Xilinx Virtex-4 XC4VFX100FFG1517-11C FPGA based

WRAP board.

Keywords: Bit error rate (BER), FPGA, Peak to signal noise ratio (PSNR), Multiple input multiple output (MIMO), WRAP board, Joint source channel coding, Space time block coding (STBC).

16.

References: **66-70**

1. Rohde and Schwarz, Introduction to MIMO, Application note.
2. M. Rupp, A.burg, "Rapid prototyping for wireless designs: the five-ones approach", Signal Processing, vol 83, pp.1427-1444, 2003.
3. "WARP:http://warp.rice.edu"
4. P.Murphy, A.Sabharwal, "Design of WARP: a wireless open-access research Platform", Proc. EURASIP XIV European Signal Processing Conference, 2006.
5. "WARP Repository:http://warp.rice.edu/trac"
6. Luis G. Barbero, John S, Thompson, "Performance analysis of a fixed-complexity sphere decorder in high-dimensional MIMO systems, ICASSP 2006 Proceedings, vol 4,2006.
7. Shahriar kaisar, Md. Sakib Rijwan, "Salt and Pepper Noise Detection and removal by tolerance based selective arithmetic mean filtering technique for image restoration", Internation Journel Of Computer Science And Network Security, vol 8, no 6, 2008.
8. "http://en.wikipedia.org/wiki/user:renatol/PSNR"
9. "http://multimediatechnology.google.com/svnhistory/r7/trunk/lab2 jpeg/info/PSNR.pdf"
10. Z.Wang and A.C.Bovik, "A universal image Quality index", IEEE Signal Processing Letters, vol 9, no 3,2002.
11. D.Gesbert, M.Shafi, "From Theory To Practice: an overview of MIMO Space time coded wireless systems", IEEE Journal On Selected Areas In Communication,vol 21, no 3, pp 281-302,2003.
12. Dales Bates, Soren Henriksen, "A 4x4 FPGA based wireless testebed for LTE applications", IEEE 19th International Symposium, pp 1-5, 2008.
13. Duan Jinghong, Deng Yaling Kun, "Develeopment Of image processing system based on DSP and FPGA", International Conference On Electronic Measurements And Instruments, pp 791-794, 2007

Authors: **A. S. Zadgaonkar, Suraj Prasad Keshari, Savita Ajay**

Paper Title: **A Model for Identifying Phishing E-Mail Based on Structural Properties**

Abstract: The widespread use of email caused the number of warnings being made about the dark side our technological revolution to increase and we are becoming uniquely vulnerable to many mysterious and malicious threats. Viruses, worms, and other forms of malicious software started targeting our email inboxes to propagate. Spam and other forms of unsolicited bulk electronic commerce started filling our email inboxes and invading our privacy. Phishing and other forms of fraud attacks have been using email as their primary communication channel to trick users into giving out their credentials. Email could have been a killer application for the Internet if none of the problems mentioned above exist.

Keywords: Phishing, email, privacy, software, Virus, computing.

17.

References: **71-74**

1. M. Chandrasekaran, R. Chinchani and S. Upadhyaya, PHONEY: Mimicking user response to detect phishing attacks, To appear at TSPUC 2005 Workshop, affiliated with IEEE WoWMoM.
2. Christine E. Drake, Jonathan J. Oliver, and Eugene J. Koontz, Anatomy of Phishing E-mail First Conference on E-mail and Anti-Spam, 2004.
3. CNET News, Phishing attacks skyrocket in 2004, 2004.
4. Harris Drucker, Donghui Wu, and Vladimir N. Vapnik, Support vector machines for Spam categorization, IEEE-NN, 10 (1999), pp. 1048--1054.
5. Debuse, JCW and VJ Rayward-Smith, Feature subset selection within a simulated annealing data mining algorithm, Journal of Intelligent Information Systems, (1997).
6. T. Joachims, Text categorization with support vector machines: learning with many relevant features, Proc. 10th European Conference on Machine Learning {ECML}-98, 1998, pp. 137-142.
7. C. Neil, L. Robert, T. Yuka and C. M. John, Client- Side Defense Against Web-Based Identity Theft, 2004.
8. Olivier de Vel, Alison Anderson, Malcolm Corney and George Mohay, Mining Email Content for Author Identification Forensics., SIGMOD: Special Section on Data Mining for Intrusion Detection and Threat Analysis, (2001).
9. S/MIME and OpenPGP.
10. M. Schwartz, Putting Next-Generation Smart Cards to Work, (2005).
11. Ke Wang and Sal Stolfo, One Class Training for Masquerade Detection, ICDM Workshop on Data Mining for Computer Security (DMSEC 03), 2003.
12. The GNU Privacy Gaurd, http://www.gnupg.org.
13. Netcraft. toolbar, http://toolbar.netcraft.com
14. Spoof-stick. toolbar, http://www.corestreet.com/spoofstick.
15. V. Vapnik, The Nature of Statistical Learning Theory, Springer, 1995.
16. Gregory L. Wittel and S. Felix Wu, On Attacking Statistical Spam Filters, First Conference on E-mail and Anti-Spam, 2004
17. "Phishing activity trends report," Anti-Phishing Working Group, Tech. Rep., Jan. 2005. [Online]. Available: http://www.antiphishing.org/reports/apwg report jan 2006.pdf
18. N. Chou, R. Ledesma, Y. Teraguchi, and J. C. Mitchell, "Client-side defense against web-based identity theft." in NDSS, 2004. [Online]. Available: http://www.isoc.org/isoc/conferences/ndss/04/proceedings/Papers/Chou.pdf
19. "Netcraft toolbar," 2006. [Online]. Available: http://toolbar.netcraft.com/
20. A. Alsaid and C. J. Mitchell, "Installing fake root keys in a pc." in EuroPKI, 2005, pp.227–239. [Online]. Available: http://dx.doi.org/10.1007/11533733 16
21. "Mozilla thunderbird," 2006. [Online]. Available: http://www.mozilla.com/thunderbird/
22. B. Leiba and N. Borenstein, "A multifaceted approach to spam reduction," in Proceedingsof the First Conference on Email and Anti-Spam (CEAS), 2004. [Online]. Available: http://www.ceas.cc/papers-2004/127.pdf
23. W. Cohen, "Learning to classify English text with ILP methods," in Advances in Inductive Logic Programming, L. De Raedt, Ed. IOS Press, 1996, pp. 124–143. [Online]. Available: citeseer.ist.psu.edu/cohen96learning.html
24. P. Graham, "Better bayesian filtering," in Proceedings of the 2003 Spam Conference, Jan 2003. [Online]. Available:

http://www.paulgraham.com/better.html
25. M. Sahami, S. Dumais, D. Heckerman, and E. Horvitz, "A bayesian approach to filtering junk e-mail," in Learning for Text Categorization: Papers from the 1998 Workshop. Madison, Wisconsin: AAAI Technical Report WS-98-05, 1998. [Online]. Available: http://robotics.stanford.edu/users/sahami/papers-dir/spam.ps
26. I. Rigoutsos and T. Huynh, "Chung-kwei: a pattern-discovery-based system for the automatic identification of unsolicited e-mail messages (spam)," in Proceedings of the First Conference on Email and Anti-Spam (CEAS), 2004. [Online]. Available: http://www.ceas.cc/papers-2004/153.pdf

Authors: **Pallavi, Reecha Sharma**

Paper Title: **Study of the Nighttime Context Enhancement Algorithms**

Abstract: Nighttime video enhancement is one of the most important components in video research as many objects can't be seen due to poor illumination of the video. The purpose of video enhancement is to improve the visual appearance of the video. In this paper, an overview of video enhancement algorithms are discussed in which the context of the high quality daytime image is added to low quality nighttime image which thus improves the background of the nighttime image, hence enhancing the foreground of the video. In this paper the advantages and issues of the algorithms are also being discussed and a comparative study is done.

Keywords: Video enhancement, Gradients, Denighting, Frame Subtraction.

References:

1. Zheng Liu, Erik Blasch,ZhiyunXue,JiyingZhao,RobertLaganie`re and Wei Wu Abstr, "Objective Assessment of Multiresolution ImageFusion Algorithms for ContextEnhancementin Night Vision: A Comparative Study", IEEE Transactions On Pattern Analysis And Machine Intelligence, Vol. 34, No. 1, January 2012.
2. Heng Su, Liang Tang, Ying Wu, Daniel Tretter and Jie Zhou, "Spatially Adaptive Block-Based Super-Resolution", IEEE Transactions On Image Processing, Vol. 21, No. 3, March 2012
3. Jagpal Singh Ubhi, JaspreetKaur, "Enhancement of Context by Image Fusion", Proceedings of the World Congress on Engineering, Vol II, July, 2011.
4. YunboRao, Zhongho Chen, Ming-Ting Sun, Yu-Feng Hsu, Zhengyou Zhang,"An effecive night video enhancement algorithm" International Conference of Pattern Recognition, 2011.
5. R. Raskar, A. Ilie, and J. Yu, "Image fusion for context enhancement and video surrealism", International Symposium on Non-Photorealistic Animation and Rendering, pp. 85-94, 2004.
6. R.C. Gonzalez and R.E. Woods, "Digital Image Processing," Person Prentice Hall, New Jersey, 2008.
7. Y. Cai, K. Huang, T. Tan, and Y. Wang, "Context enhancement of nighttime surveillance by image fusion", ICPR, pp.980–983, 2006.
8. AminaSaleem, Azeddine Beghdadi1 and BoualemBoashash, "Image fusion-based contrast enhancement", EURASIP Journal on Image and Video Processing 2012.
9. A. Yamasaki, H. Takauji, S. Kaneko, T. Kanade, and H. Ohki, "Denighting: enhancement of nighttime image for a surveillance camera," IEEE, 19th International Conference of Pattern Recognition, 2008.
10. YunboRao, Leiting Chen, "A Survey of Video Enhancement Techniques", Journal of Information Hiding and Multimedia Signal Processing Volume 3, Number 1, January 2012.
11. Zhou Wang, and Alan C. Bovik, "A Universal Image Quality Index", IEEE Signal Processing Letters, Vol. 9, No. 3, March 2002.
12. E. P. Bennett and L. McMillan, "Video enhancement using per-pixel virtual exposures", In Proc. of ACM SIGGRAPH, volume 24, July 2005.
13. Liu Lei, Piao Yan, Liu Xiaoyu, "Enhancement of Nighttime Images for a Surveillance Camera" IEEE International Conference on Svstem of Svstems Engineering (SoSE), 2012.

18. **75-78**

Authors: **Akhil Gupta, Randhir Singh, Jang Bahadur Singh, Parveen Lehana**

Paper Title: **To Investigate the Effect of Microwaves Treated Water on Growth of Brassica Seeds**

Abstract: Microwaves spans a range from 300 MHz to 300 GHz. Although these waves have been used in many electronic appliances for the welfare of human beings, they may be very harmful for living beings. The bad effects of microwaves have also been investigated for several crops. This paper investigates the effect of microwaves treated water on the growth rate of Brassica seeds. During investigations, the other control variables such as temperature, humidity, sun light and level of gases (CO_2, N_2, and O_2) were maintained constant. It has been observed that microwaved water exposed for a specific power level and duration showed better growth rate as compared to normal water for the development of Brassica seeds.

Keywords: Water, Soil, Microwave (MW) and Mustards.

References:

1. Ishii T.K. (1995), Handbook of Microwave Technology – Vol. 2, Applications, Academic Press, San Diego, p 33 - 50, p 249 – 285.
2. Roddy, D. (1986), Microwave technology, Prentice Hall, New Jersey, pp. 363 - 377, pp. 521 - 584, Prentice-Hall, New Jersey.
3. T.W. Wong, A. Iskhandar, M. Kamal, S.J. Jumi, N.H. Kamarudin, N.Z. Mohamadzin, and N.H. Mohd Salleh,"Effects of microwave on water and its influence on drug dissolution," Progress In Electromagnetics Research C, Vol. 11, pp121-136, 2009.
4. G. Macelloni, S. Paloscia, P. Pampaloni, and R. Ruisi," Microwave emission features of crops with vertical stems," IEEE transactions on geoscience and remote sensing, vol. 36, no. 1, January 1998.
5. G. Brodie, C. Rath, M. Devanny, J. Reeve, C. Lancaster, T. Doherty, G. Harris, S. Chaplin, C. Laird, "The effect of microwave treatment on animal fodder," Journal of Microwave Power and Electromagnetic Energy, University of Melbourne, 3010, Victoria, no.46, vol.2, pp. 57-67, 2012.
6. O. P. N. Calla, D. M. Sanjeev, M. Alam, D. Hazarika, and L. Ramawat, "Effect of microwave radiation on the electrical parameters of soil," Indian Journal of Radio & Space Physics, vol. 36, pp. 229-233, 2007.
7. J. K. Grover, S. Yadav, and V. Vats. Hypoglycemic and antihyperglycemic "Effect of Brassicajuncea diet and their effect on hepatic glycogen content and the key enzymes of carbohydrate metabolism," Mol Cell Biochem. 2002 Dec;241(1-2):

18. **79-82**

pp. 95-101.
8. S. P. Yadav, V. Vats, A.C. Ammini , and J. K. Grove. “Brassica juncea (Rai) significantly prevented the development of insulin resistance in rats fed fructose-enriched diet,” J. Ethnopharmaco, 2004; 93.pp. 113-116.
9. M. S. Alam, G. Kaur, Z. Jabbar, K. Javed, and M. Athar. “Eruca sativa seeds possess antioxidant activity and exert a protective effect on mercuric chloride induced renal toxicity. Food Chem Toxicol 2007; 45 (6): 910 – 92 Alqasoumi S.Carbon tetrachloride-induced hepatotoxicity: protective effect of rocket,”Eruca sativa L. in rats. Am J Chin Med. 2010;38(1): pp. 75-88.

19.

Authors: **Swapnali Sundar Sadamate, V. S. Nandedkar**

Paper Title: **Review Paper on Calculation, Distribution of Trust & Reputation in MANET**

Abstract: This paper is Review on Managing trust in a distributed Mobile Ad Hoc Network (MANET) Which is a challenging when collaboration or cooperation is critical to achieving mission and system goals such as reliability, availability, scalability, and reconfigurability. In defining and managing trust in a military MANET, we must consider the interactions between the composite cognitive, social, information and communication networks, and take into account the severe resource constraints. We provide a survey of trust management schemes developed for MANETs and discuss generally accepted classifications, potential attacks, performance metrics, and trust metrics in MANETs. Finally, we discuss future research areas on trust management in MANETs based on the concept of social and cognitive networks.

Keywords: MANET, Security, Trust.

References:

1. Jin-Hee Cho; Swami, A.; Ing-Ray Chen;“A Survey on Trust Management for Mobile Ad Hoc Networks”, Communications Surveys Tutorials, IEEE , vol.13, no.4, pp.562-583, Fourth Quarter 2011.
2. Jared Cordasco1, Susanne Wetzel1;“Cryptographic Versus Trust-based Methods for MANET Routing Security,” 2008.
3. Jie Li; Ruidong Li; Jien Kato; “Future trust management framework for mobile ad hoc networks,” Communications Magazine, IEEE , vol.46, no.4, pp.108-114, April 2008.
4. Lacharite, Y.; Dang Quan Nguyen; Maoyu Wang; Lamont, L.; “A trust-based security architecture for tactical MANETS,” Military Communications Conference, 2008. MILCOM 2008. IEEE, vol., no., pp.1-7, 16-19 Nov. 2008.
5. Wei Gong; Zhiyang You; Danning Chen; Xibin Zhao; Ming Gu; Kwok-Yan Lam;“ Trust Based Malicious Nodes Detection in MANET”, E-Business and Information System Security, 2009. EBISS ’09. International Conference on, vol., no., pp.1-4, 23-24 May 2009.
6. Govindan, K.; Mohapatra, P.;“Trust Computations and Trust Dynamics in Mobile Adhoc Networks: A Survey”, Communications Surveys Tutorials, IEEE , vol.PP, no.99, pp.1-20, 0.
7. Raihana Ferdous, Vallipuram Muthukkumarasamy, Abdul Sattar;“Trust Management Scheme for Mobile Ad-Hoc Networks ”, 2010 10th IEEE International Conference on Computer and Information Technology (CIT 2010).
8. A. A. Pirzada and C. McDonald, “Trust establishment in pure ad-hoc networks,” Wireless Personal Communications, vol. 37(1-2), pp. 139–168, 2006
9. S. Buchegger and J. L. Boudec, “A robust reputation system for P2P and mobile ad-hoc networks,” in In Proc. 2nd Workshop on Economics of Peer-to-Peer Systems, 2004.
10. Z. Liu, A. W. Joy, and R. A. Thompson, “A dynamic trust model for mobile ad hoc networks,” in IEEE International Workshop on Future Trends of Distributed Computing Systems, FTDCS’04, pp. 80–85, May 2004.
11. M. Virendra, M. Jadliwala, M. Chandrasekaran, and S. Upadhyaya, “Quantifying trust in mobile ad-hoc networks,” in International Conference on Integration of Knowledge Intensive Multi-Agent Systems, pp. 65–70, April 18-21, 2005.
12. S. S. Park, J. H. Lee, and T. M. Chung, “Cluster-based trust model against attacks in ad-hoc networks,” in Third International Conference on Convergence and Hybrid In63formation Technology, pp. 526–532, 2008.
13. D. Quercia, S. Hailes and L. Capra, “Lightweight distributed trust propagation,” in The Seventh IEEE International Conference on Data Mining, pp. 282–291, 2007.

83-88

20.

Authors: **Luaay A. shihab**

Paper Title: **Information Hiding Using 8 Bit Image**

Abstract: Steganography is the process of hiding a secret message within alarger one in such a way that someone cannot know the presence or contents of the hidden message. The purpose of Steganography is to maintain secretcommunication between two parties. This paper will show how steganography used in a modern context while providing a practical understanding of what steganography is and how to accomplish it. Digital watermarking is one of the proposed solutions for copyright protection of multimedia data. This technique is better than Digital Signatures and other methods because it does not increase overhead. Digital Watermarking describes methods and technologies that hide information, for example a number or text, in digital media, such as images, video or audio. The embedding takes place by manipulating the content of the digital data, which means the information is not embedded in the frame around the data. In this paper cryptography based Blind image watermarking technique presented that can embed more number of watermark bits in the gray scale cover image without affecting the imperceptibility and increase the security of watermark . In this research colored images are used to hideArabic and English texts. The images with BMP extension are used for such hiding operation. The reason behind using BMP type is offering because of it’s moreaccuracy in showing the image without any of compressed data and it is considered tobe the most used format in hiding operation, in addition it can handle most importantcolor levels such as (8 bits). The steganography method applied in this work is executed by Delphi language.

Keywords: Steganography, encryption, decryption, information hiding, image.

References:

1. Analysis and Implementation of Distinct Steganographic Methods Kavaklıdere, Ankara/TURKEY 2002.
2. information hiding using steganography/muhalim Mohamed amin/university teknologimalaysia 2003.

89-92

3. an overview of image steganography/ t .morkel, j.h.p.eloft/university of Pretoria
4. Chi-Kwong Chan and L. M. Chen, “hiding data in images by simple LSB substitution”, Pattern Recognition , 37 (2004), 469-474.
5. LINGUISTIC STEGANOGRAPHY: SURVEY, ANALYSIS, AND ROBUSTNESSCONCERNS FOR HIDING INFORMATION IN TEXT by Krista Bennett 2004
6. Text Hiding Using Artificial Neural NetworksHaiderTarishHaider Engineering College, University of Al-Mustansiriyah /Baghdad , 2012.
7. AlkhraisatHabes, "Information Hiding in BMP image Implementation, Analysis and Evaluation",2006 .
8. Delphi language guide October 2004 scotts valley ,California.
9. Information hiding techniques A tutorial reviewSabuMthampi (Assistant professor , LBS college of engineering Kasarng of – Kerala – India 2004) .
10. Steganography Implementation on (BMe) colored image type Shaed Abdul rahmanHisson , Ilaf Osama AbdElmajid university of Mosul 2008 .
11. building user interfaces with Delphi 2009 , Corporate Headquarters / San Francisco California , 4111 EMEA / SL6 1SF , United kingdom Asia – Pacific Headquarters Melbourne VIC 3000 / Australia .
12. Digital Image Steganography Pradeep Kumar Saraswat RK Gupta VSRD international Journal of computer science India 2012 .
13. Informationhiding techniques forSteganography and digital water marking / Stefan Kat ZenbeisserFnbienA.P.Petitcolas 2000 .
14. AN OVERVIEW OF IMAGE STEGANOGRAPHY