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1.	Authors:	Aniruddha S. Rumale, D. N. Chaudhari	
	Paper Title:	Cloud Computing: Infrastructure as a Service	
	<p>Abstract: Cloud computing is becoming much popular due to many of its advantages like high performance, distributed computing, high security, pay per use modules etc. . . . Cloud is evolved from simple networking applications. Grid/Cluster/Utility Computing helped formation of basic infrastructure as a service concept. Distributed concurrent and parallel processing with service oriented architecture set a platform for virtualization of resources, making cloud computing possible. This paper talks on the IaaS(Infrastructure as a Service) model of the cloud computing. Authors of this paper, gathered, analysed and drafted all the up to date information on the IaaS. The paper thus discuss in detail the types of infrastructures that can be made available as service with all issues regarding designing and implementing IaaS. Thus the paper can be seen as the IaaS cheat sheet as well as documentation which discusses in brief the historical growth of Information communication technology (ICT) towards cloud computing.</p> <p>Keywords: Grid, Clusters, Utility Computing, SOA, DCS, IaaS, Cloud Computing, Cloud Computing issues.</p> <p>References:</p> <ol style="list-style-type: none"> 1. A. S. Tanenbaum, Computer Networks, 4th ed. Prentice Hall, Upper Saddle River, New Jersey 07458, 2003. 2. J. Lasica, Identity in the Age of Cloud Computing: The ext-generation Internets impact on business, governance and social interaction, C. M. Firestone and P. K. Kelly, Eds. The Aspen Institute, Publications Office, P.O. Box 222, 109 Houghton Lab Lane, Queenstown, Maryland 21658, Phone: (410) 820-5326, Fax: (410) 827-9174E-mail: publications@ aspeninstitute.org, 2009, ISBN: 0-89843-505-6. 3. D. P. K. Sinha, Distributed Operating Systems: Concepts & Design, ser. Eastern Economic Edition. 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2.	Authors:	Deepender Dhull, Swati Dhull	
	Paper Title:	An Improved Ant Colony Otimization (IACO) Based Multicasting in MANET	
	<p>Abstract: A Mobile Ad hoc Network (MANET) is one of the challenging environments for multicast. Since the associated overhead is more, the existing studies illustrate that tree-based and mesh-based on-demand protocols are not the best choice. The costs of the tree under multiple constraints are reduced by the several algorithms which are based on the Ant Colony Optimization (ACO) approach. The traffic-engineering multicast problem is treated as a single-purpose problem with several constraints with the help of these algorithms. The main disadvantage of this approach is the need of a predefined upper bound that can isolate good trees from the final solution. In order to solve the traffic engineering multicast problem which optimizes many objectives simultaneously this study offers a design on Ant Based Multicast Routing (AMR) algorithm for multicast routing in mobile ad hoc networks. Apart from the existing constraints such as distance, delay and bandwidth, the algorithm calculates one more additional constraint in the cost metric which is the product of average-delay and the maximum depth of the multicast tree. Moreover it also attempts to reduce the combined cost metric. By reducing the number of group members that participate in the construction of the multicast structure and by providing robustness to mobility by performing broadcasts in densely clustered local regions, the proposed protocol achieves packet delivery statistics that are comparable to that with a pure multicast protocol but with significantly lower overheads. By this</p>		8-12

	<p>protocol we achieve increased Packet Delivery Fraction (PDF) with reduced overhead and routing load. By simulation results, it is clear that our proposed algorithm surpasses all the previous algorithms by developing multicast trees with different sizes.</p> <p>Keywords: ACO, AMR, APPMULTICAST, MANET.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Lin Huang, Haishan Han and Jian Hou, "Multicast Routing Based on the Ant System", Applied Mathematical Sciences, Vol. 1, 2007, no. 57, 2827 – 2838. 2. Diego Pinto, Benjamín Barán and Ramón Fabregat, "Multi- Objective Multicast Routing based on Ant Colony Optimization", National Computing Center, National University of Asuncion – Paraguay 3. Hua Wang, Zhao Shi, Shuai Li, "Multicast routing for delay variation bound using a modified ant colony algorithm ",Journal of Network and Computer Applications, 2008 – Elsevier 4. Diego Pinto, and Benjamín Barán, "Multiobjective Max-Min Ant System. An application to Multicast Traffic Engineering", 7^o Symposium Argentino de Inteligencia Artificial - ASAI2005, Rosario, 29-30 de Agosto de 2005 5. Zeyad M. Alfawaer, GuiWei Hua, and Noraziah Ahmed, "A Novel Multicast Routing Protocol for Mobile Ad Hoc Networks, "American Journal of Applied Sciences 4 (5): 333-338, 2007, ISSN 1546-9239 6. M. Mauve et al., Position-Based Multicast Routing for Mobile Ad-Hoc Networks, tech. report TR-03-004, Computer Science Dept.,Univ. of Mannheim, 2003 					
	<table border="1"> <tr> <td>Authors:</td> <td>Zhenxing Luo</td> </tr> <tr> <td>Paper Title:</td> <td>Distributed Estimation and Detection in Wireless Sensor Networks</td> </tr> </table>	Authors:	Zhenxing Luo	Paper Title:	Distributed Estimation and Detection in Wireless Sensor Networks	
Authors:	Zhenxing Luo					
Paper Title:	Distributed Estimation and Detection in Wireless Sensor Networks					
3.	<p>Abstract: Distributed estimation and detection are the two most important tasks of wireless sensor networks (WSNs). In the detection task, the fusion center needs to make a decision about the presence of a target. Usually, to make this decision, the fusion center uses a threshold. If the received signal is greater than the threshold, the fusion center considers the target is present. If the received signal is less than the threshold, the fusion center considers the target is absent. In the estimation problem, the fusion center will use a maximum likelihood estimation (MLE) method to estimate target location. In this MLE method, a threshold is needed for sensors to quantize information before sending information to the fusion center. This paper will investigate whether the two thresholds are identical. This problem is practically important because if the two thresholds are identical, the design of WSNs can be simplified.</p> <p>Keywords: Distributed detection, distributed estimation, K-L distance, wireless sensor networks.</p> <p>References:</p> <ol style="list-style-type: none"> 1. I. Akyildiz, W. Su, Y. Sankarasubramaniam, and E. Cayirci, "A survey on sensor networks," IEEE Commun. Mag., vol. 40, pp. 102-114, 2002. 2. Z. X. Luo and T. C. Jannett, "Energy-Based Target Localization in Multi-Hop Wireless Sensor Networks", in Proceedings of the 2012 IEEE Radio and Wireless Symposium, Santa Clara, CA, Jan. 2012. 3. Z. X. Luo and T. C. Jannett, "A Multi-Objective Method to Balance Energy Consumption and Performance for Energy-Based Target Localization in Wireless Sensor Networks", in Proceedings of the 2012 IEEE Southeastcon, Orlando, FL, Mar. 2012. 4. Z. X. Luo and T. C. Jannett, "Performance Comparison between Maximum Likelihood and Heuristic Weighted Average Estimation Methods for Energy-Based Target Localization in Wireless Sensor Networks", in Proceedings of the 2012 IEEE Southeastcon, Orlando, FL, Mar. 2012. 5. Z. X. Luo and T. C. Jannett, "Modeling Sensor Position Uncertainty for Robust Target Localization in Wireless Sensor Networks", in Proceedings of the 2012 IEEE Radio and Wireless Symposium, Santa Clara, CA, Jan. 2012. 6. Z. X. Luo and T. C. Jannett, "Optimal threshold for locating targets within a surveillance region using a binary sensor network", Proc. of the International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE 09), Dec., 2009. 7. Z. X. Luo, "A censoring and quantization scheme for energy-based target localization in wireless sensor networks", Journal of Engineering and Technology, 2012, vol. 2, no 2, pp. 69-74. 8. Z. X. 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Luo, "Parameter estimation in wireless sensor networks based on decisions transmitted over Rayleigh fading channels", International Journal of Soft Computing and Engineering, vol. 2, no. 6, Jan, 2013. 13. X. Sheng and Y. H. Hu, "Maximum Likelihood Multiple-Source Localization Using Acoustic Energy Measurements with Wireless Sensor Networks", IEEE Transactions on Signal Processing, vol.53, no.1, pp. 44-53, Jan. 2005. 14. R. X. Niu and P. K. Varshney, "Target Location Estimation in Sensor Networks with Quantized Data", IEEE Transactions on Signal Processing, vol. 54, pp. 4519-4528, Dec. 2006. 15. A. Ribeiro, and G. B. Giannakis, "Bandwidth-constrained Distributed Estimation for Wireless Sensor Networks-part I: Gaussian case," IEEE Trans. Signal Process., vol. 54, no. 3, pp.1131-43, March 2006. 16. A. Ribeiro, and G. B. Giannakis, "Bandwidth-constrained Distributed Estimation for Wireless Sensor Networks-part II: Unknown Probability Density Function," IEEE Transactions on Signal Process., vol. 54, no. 7, pp. 2784-96, July 2006. 17. G. Liu, B. Xu, M. Zeng, and H. Chen, "Distributed Estimation over Binary Symmetric Channels in Wireless Sensor Networks," IET Wireless Sensor Systems, vol. 1, pp. 105-109, 2011. 18. L. Zuo, R. Niu, and P.K. Varshney, "Conditional Posterior Cramer-Rao Lower Bounds for Nonlinear Sequential Bayesian Estimation," IEEE Transactions on Signal Processing, Vol. 59, No. 1, pp. 1-14, January 2011. 19. E. Maşazade, R. X. Niu, P. K. Varshney, and M. Keskinöz, "Energy Aware Iterative Source Localization for Wireless Sensor 	13-16				

	<p>Networks," Signal Processing, IEEE Transactions on , vol.58, no.9, pp.4824-4835, Sept. 2010</p> <p>20. C. Hao, P. K. Varshney, and J. H. Michels, "Improving Sequential Detection Performance Via Stochastic Resonance," IEEE Signal Processing Letters, vol.15, no., pp.685-688, 2008</p> <p>21. W. H. Press, S. A. Teukolsky, W. T. Vetterling, B. P. Flannery "Section 14.7.2. Kullback-Leibler Distance". Numerical Recipes: The Art of Scientific Computing (3rd ed.). New York: Cambridge University Press 2007.</p>					
4.	<table border="1"> <tr> <td>Authors:</td> <td>K. Kavitha, K. Selvakumar, T. Nithya, S. Sathyabama</td> </tr> <tr> <td>Paper Title:</td> <td>Geographic Information Based Protocol Analysis (EGMP)</td> </tr> </table>	Authors:	K. Kavitha, K. Selvakumar, T. Nithya, S. Sathyabama	Paper Title:	Geographic Information Based Protocol Analysis (EGMP)	
Authors:	K. Kavitha, K. Selvakumar, T. Nithya, S. Sathyabama					
Paper Title:	Geographic Information Based Protocol Analysis (EGMP)					
	<p>Abstract: Mobile Ad-hoc Network (MANET) is a group of wireless nodes that are distributed without relying on any standing network infrastructure. Group communication plays an important role in MANETs. To implement this group communication, we propose an Efficient Geographic Multicast Routing protocol (EGMP) with the help of virtual zone based structure. This EGMP protocol deals with the position information which is used to construct zone structure, multicast tree and multicast packet forwarding. The performance metrics such as Packet Delivery Ratio (PDR), End to End delay and Control Overhead of EGMP are also evaluated through simulations and quantitative analysis by varying number of nodes, zone size and group size. Our simulation result shows that EGMP has high packet delivery ratio, low control overhead and multicast group joining delay under all test scenarios when compared with On-Demand Multicast Routing Protocol (ODMRP) and Scalable Position Based Multicast Routing Protocol (SPBM), and is scalable to group size.</p> <p>Keywords: MANET, EGMP, SPBM, ODMRP, Zone Structure, Performance metrics.</p> <p>References:</p> <ol style="list-style-type: none"> 1. X. Xiang, X. Wang, and Y. Yang, "Supporting Efficient and Scalable Multicasting over Mobile Ad Hoc Networks", IEEE Transactions On Mobile Computing, VOL. 10, NO. 4, April 2011 2. X. Xiang and X. Wang. "An Efficient Geographic Multicast Protocol for Mobile Ad Hoc Networks", In IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), Niagara-Falls, Buffalo, New York, June 2006. 3. Luo Junhai, Ye Danxia, Xue Liu, and Fan Mingyu "A Survey of Multicast Routing Protocols for Mobile Ad-Hoc Networks", In IEEE Communications Surveys & Tutorials, VOL. 11, NO. 1, FIRST QUARTER 2009. 4. X. Xiang, Z. Zhou and X. Wang. "Self-Adaptive On Demand Geographic Routing Protocols for Mobile Ad Hoc Networks", In IEEE INFOCOM07 minisymposium, Anchorage, Alaska, May 2007. 5. M. Transier, H. Fubler, J. Widmer, M. Mauve, and W. Effelsberg. "A Hierarchical Approach to Position-Based Multicast for Mobile Ad-hoc Networks", In Wireless Networks, vol. 13 no. 4, Springer, pp. 447-460, August 2007. 6. C. Gui and P. Mohapatra. "Overlay Multicast for MANETs Using Dynamic Virtual Mesh", In ACM/Springer Wireless Networks (WINET), Jan. 2007. 7. S.M.Das, H. Pucha and Y.C. Hu. "Distributed Hashing for Scalable Multicast in Wireless Ad Hoc Network". In IEEE Transactions on Parallel and Distributed Systems (TPDS), Vol 19(3), March 2008. 8. K.Kavitha and K.Selvakumar. "Performance Evaluation of Odmrp and Admr Using Different Mobility Models". In International Journal of Computer Application, Sep 2012 9. J. Li and et al. "A scalable location service for geographic ad hoc routing", In Proceedings of the ACM/IEEE International Conference on Mobile Computing and Networking (MOBICOM), pages 120–130, 2000. 10. S. Giordano and M. Hamdi. "Mobility management: The virtual home region", In Tech. report, October 1999. 11. S. Basagni, I. Chlamtac, and V. R. Syroitiuk, "Location aware, dependable multicast for mobile ad hoc networks", Computer Networks, vol. 36, no.5-6, pp. 659670, August 2001. 12. K. Chen and K. Nahrstedt. "Effective location-guided tree construction algorithms for small group multicast in MANET", In IEEE INFOCOM, 2002, pp. 11801189. 13. M. Mauve, H. Fubler, J. Widmer, and T. Lang. "Position-based multicast routing for mobile ad-hoc networks",. In Poster session in ACM MOBIHOC, June 2003. 14. S. Lee, W. Su, J. Hsu, M. Gerla, and R. Bagrodia. "A performance comparison study of ad hoc wireless multicast protocols", In IEEE INFOCOM, 2000 	17-22				
5.	<table border="1"> <tr> <td>Authors:</td> <td>Yang Xing, Tony Liu, Xiao Chen</td> </tr> <tr> <td>Paper Title:</td> <td>New ZCW Complete Complementary Code Set and its Analysis</td> </tr> </table> <p>Abstract: A new complete complementary code set with zero correlation window (ZCW) is constructed and it can be seen as a natural extension of conventional complete complementary code without ZCW. The construction method of this code set is motivated by that of Loose Synchronous (LS) code used in LAS-CDMA system. The main property of the new complementary code set of order 4 is that it can provide twice the number of code as the conventional LS code under the condition of same ZCW. The construction method of the new code set and the proof of the properties are shown in this paper.</p> <p>Keywords: Zero Correlation Window (ZCW), Complete Complementary Code Set, Loose Synchronous (LS) code.</p> <p>References:</p> <ol style="list-style-type: none"> 1. D. B. Li, "The perspectives of large area synchronous CDMA technology for the fourth-generation mobile radio", IEEE Communication Magazine, vol. 43, pp. 114-118, March. 2003 2. A. J. Viterbi, CDMA: Principles of Spread Spectrum Communications. Reading, MA: Addison-Wesley, 1995. 3. L. R. Welch, "Lower bounds on the maximum cross-correlation of signals", IEEE Trans inform. Theory, vol. 20, pp. 397-399, May. 1974. 4. M. J. E. Golay, Complementary series, IRE Trans. Inform. Theory, vol. IT-7, pp. 82–87, Apr. 1961. 5. P Z Fan, N. Suehiro, N. Kuroyanagi, and X. M. Deng, A class of binary sequences with zero correlation zone, Electronics Letters, vol. 35, pp. 777-779, May. 1999. 6. Li D B, A spread spectrum multiple access coding method with zero correlation window [P]. PCT/CN00/00028. 2000. 	Authors:	Yang Xing, Tony Liu, Xiao Chen	Paper Title:	New ZCW Complete Complementary Code Set and its Analysis	23-25
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Authors: Nikhil Sharma, Niharika Mehta

Paper Title: Region Filling and Object Removal by Exempeler Based Image Inpainting

Abstract: Object removal from images is an image manipulation technique. Objects are removed from digital images and the hole left behind is filled by a graphical technique called inpainting in a visually plausible way. This technique can be applied not only to images consisting of simple textures but also to real life images having complex textures and color scheme. The goal in each case is to produce a modified image in which inpainted region is merged into the image so seamlessly that typical viewer is not aware that any modification has occurred. Applications in image inpainting range from removal of an object from a scene to retouching of a damaged painting or photograph. Removing elements such as stamp dates or unwanted text from a picture. Red-eye removal also is one of the

6.	<p>applications.</p> <p>Keywords: Image manipulation technique, graphical technique called inpainting in a visually plausible way.</p> <p>References:</p> <ol style="list-style-type: none"> 1. P. Harrison. A non-hierarchical procedure for re-synthesis of complex texture. In Proc.Int. Conf. Central Europe Comp. Graphics, Visua. And Comp. Vision, Plzen, CzechRepublic, February 2001. 2. M.Bertalmio, A.L. Bertozzi, and G. Sapiro. Navier-stokes, fluid dynamics, and imageand video inpainting. In Proc. Conf. Comp. Vision Pattern Rec., pages I:355–362, Hawaii, December 2001. 3. A. Efros and W.T. Freeman. Image quilting for texture synthesis and transfer. In Proc.ACM Conf. Comp. Graphics (SIGGRAPH), pages 341–346, Eugene Fiume, August 2001. 4. A. Zalesny, V. Ferrari, G. Caenen, and L. van Gool. Parallel composite texture synthesis. In Texture 2002 workshop - ECCV, Copenhagen, Denmark, June 2002. 5. A. Criminisi, P. Perez, and K. Toyama. Object removal by exemplar-based inpainting. In Proc. Conf. Comp. Vision Pattern Rec., Madison, WI, Jun 2003. 6. M. Bertalmio, G. Sapiro, V. Caselles, and C. Ballester. Image inpainting. In Proc. ACM Conf. Comp. Graphics (SIGGRAPH), pages 417–424, New Orleans, LU, July 2000. 7. http://mountains.ece.umn.edu/~guille/inpainting.htm. 8. M. Bertalmio, L. Vese, G. Sapiro, and S. Osher. Simultaneous structure and texture image inpainting. In Proc. Conf. Comp. Vision Pattern Rec., Madison, WI, 2003. 9. http://mountains.ece.umn.edu/~guille/inpainting.htm. 	26-31
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7.	<p>Authors: A. M. Bojamma, B. Nithya, Prasad C. N, M. N. Nachappa</p> <p>Paper Title: Biometric Security Systems</p> <p>Abstract: The modern information technology evolution demands the use of computer networks with strict security performance. The password-based authentication system and the token-based systems that are currently deployed are not able to meet this performance Verification using biometrics has become in the last few years a key issue in security and privacy .The problems of traditional personal authentication systems may be solved by biometric systems. Information security has gained more and more attention from researchers because it plays an important role in our daily life. Biometrics-based authentication offers several advantages over other authentication methods; hence there has been a significant rise in the use of biometrics for user authentication in recent years. It is important that such biometrics-based authentication systems be designed to withstand attacks when employed in critical applications, especially in remote applications which are unattended such as ecommerce environment. In this paper we outline the strengths and weakness of biometrics-based authentication, and techniques to enhance the strength of the biometric system with new solutions for eliminating some of the weak links with techniques like steganography, watermarking, cryptosystems. For illustration purpose, finger print authentication, facial recognition has been considered.</p> <p>Keywords: Steganography , watermarking, cryptosystem.</p> <p>References:</p> <ol style="list-style-type: none"> 1. R. M. Bolle, N. K. Ratha, A. Senior, and S. Pankanti. Minutiae template exchange format. In Proc. AutoID 1999, IEEE Workshop on Identification Advanced Technologies, pages 74{77, 1999. 2. R. Cappelli, A. Erol, D. Maio, and D. Maltoni. Synthetic fingerprint image generation. In Proc. International Conference on Pattern Recognitio vol. 3, pages 475{478, 2000. 3. T. C. Clancy, N. Kiyavash, and D. J. Lin. Secure smartcard-based fingerprint authentication. In Proc. ACM SIGMM Multimedia, Biometrics and Applications Workshop, pages 45{52, 2003. 4. Colorado State University. Evaluation of face recognition algorithms. Available at www.cs.colostate.edu/evalfacerec/index.htm 5. Congress of the United States of America. Enhanced Border Security and Visa Entry Reform Act of 2002. Available at http://unitedstatesvisas/Enhanced Border Securityand Visa Entry.pdf, 2002. 6. S. Dass and A. K. Jain. Fingerprint classification using orientation field °ow curves. In Proc. Indian Conference on Computer Vision, Gra Image Processing, pages 650{655, 2004. 7. S. C. Dass. Markov random field models for directional field and singularity extraction in fingerprint images. IEEE Transactions Processing,13(10):1358{1367, October 2004. 8. Institute of Paper Science and Technology, Georgia Institute of Technology. Watermarks. Availa http://www.ipst.gatech.edu/amp/education/watermark/watermarks.htm. 9. A. K. Jain, R. Bolle, and S. Pankanti, editors. Biometrics: Personal Identification in Networked Society. Kluwer Academic Publishers, New Yo 10. A. K. Jain, L. Hong, S. Pankanti, and R. Bolle. An identity authentication system using fingerprints. Proceedings of the IEEE, 85(9):13 September 1997. 11. A. K. Jain and U. Uludag. Hiding biometric data. IEEE Transactions on PatternAnalysis and Machine Intelligence, 25(11):1494{1498, Novem 12. Body Check: Biometric Access Protection Devices and their Programs Put to the Test Lisa Thalheim, Jan Krissler, and Peter-Michael Ziegler 13. T. Matsumoto, H. Matsumoto, K. Yamada, and S. Hoshino. Impact of artificial gummy fingers on fingerprint systems. In Proc. of SPIE, Optical and Counterfeit Deterrence Techniques IV, vol. 4677, pages 275{289, 2002. 	32-38
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	<p>Authors: Rashmi Chandra, Rohit Raja</p> <p>Paper Title: An Enhanced Technique for Red-Eye Detection and Correction Using Neural Network</p> <p>Abstract: Redeye is a common problem in consumer photography. When a flash is needed to illuminate the scene, the ambient illumination is usually low and a person’s pupils will be dilated. Light from the flash can thus reflect off the blood vessels in the person’s retina. In this case, it appears red in color and this reddish light is recorded by the camera. Though commercial solutions exist for red-eye correction, all of them require some measure of user intervention. A method is presented to automatically detect and correct red-eye in digital images. The algorithm contains a redeye detection part and a correction part. The detection part is modeled as a feature based object detection problem. Adaboost is used to simultaneously select features and train the classifier. A new feature set is designed to address the orientation-dependency problem associated with the Haar-like features commonly used for object detection design. For each detected redeye, a correction algorithm is applied to do adaptive desaturation and darkening over the redeye region. . The experimental results indicate that, the system can remove the red-eye</p>	
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automatically and effectively in the digital photo and has good robustness and rapidity.

Keywords: Redeye detection, redeye correction, face detection, image processing, neural network.

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