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	Authors:	Kirna Rani, Kamaljeet Kaur Magnat	
	Paper Title:	Evaluation and Analysis of Wireless Networks & MANETS	
1.	<p>Abstract: A network is a collection of two or more computer systems which connected with each other. It is type of replace of information to communicate with one another. It is an association or set up of computer devices which are involved with the communication facilities. When number of computer is connected simultaneously to exchange information they form networks and contribute to resources. Networking is used to distribute information like data communication. Sharing resources can be software type or hardware types. It is central administration system or supports these types of system [1]. The communications protocols used to organize network traffic, with the network's size, its topology and its organizational intent. A network can be wired network and wireless network. Wired network is that which used wires for communicate with each other's and wireless network is that which communicate without the use of wires through a medium. In order to detect and Isolation of Selective Packet Drop Attack in Mobile Ad hoc Networks, we will discuss how study and evaluate the Selective packet Drop attack in MANET and its consequences in this paper.</p> <p>Keywords: Wireless Sensor Network, MANET, AODV.</p> <p>References:</p> <ol style="list-style-type: none"> Sunil Taneja, Dr. Ashwani Kush, Amandeep Makkar, "End to End Delay Analysis of Prominent On-demand Routing Protocols", IJCSST Vol. 2, Issue1, March 2011 ABDUL HAIMID BASHIR MOHAMED, thesis, "ANALYSIS AND SIMULATION OF WIRELESS AD-HOC NETWORK ROUTING PROTOCOLS"2004 Giovanni Vigna Sumit Gwalani Kavitha Srinivasan Elizabeth M. Belding-Royer Richard A. Kemmerer, "An Intrusion Detection Tool forAODV-based Ad hocWireless Networks", 2004 Sevil Şen, John A. Clark, Juan E. Tapiador, "Security Threats in Mobile Ad Hoc Networks", 2010 Rusha Nandy, "Study of Various Attacks in MANET and Elaborative Discussion Of Rushing Attack on DSR with clustering scheme" Int. J. Advanced Networking and Applications Volume: 03, Issue: 01, Pages:1035-1043 (2011) Wenjia Li and Anupam Joshi , "Security Issues in Mobile Ad Hoc Networks- A Survey",2005 Gene Tsudik, "Anonymous Location-Aided Routing Protocols for Suspicious MANETs", 2010 Karim El Defrawy, and Gene Tsudik , "ALARM: Anonymous Location-Aided Routing in Suspicious MANETs" , IEEE TRANSACTIONS ON MOBILE COMPUTING, VOL. 10, NO. 9, SEPTEMBER 2011 Steven M. Bellovin and Michael Merritt "Limitations of the Kerberos Authentication", USENIX – winter 1991 Seung Yi, Robin Kravets, "Key Management for Heterogeneous Ad Hoc Wireless Networks" , 10 th IEEE International Conference on Network Protocols (ICNP'02) 1092-1648 Pradeep kyananur "Selfish MAC layer Misbehavior in wireless networks", IEEE on Mobile Computing, 2005 Yixin Jiang Chuang Lin, Minghui Shi, Xuemin Shen "Multiple Key Sharing and Distribution Scheme With (n; t) Threshold for NEMO Group Communications", IEEE 2006 Caimu Tang ,Dapeng Oliver "An Efficient Mobile Authentication Scheme for Wireless Networks", IEEE Tien-Ho Chen and Wei-Kuan, Shih, "A Robust Mutual Authentication Protocol for Wireless Sensor Networks ETRI Journal, Volume 32, Number 5, October 2010 Sushma Yalamanchi and K.V. Sambasiva Rao "Two-Stage Authentication For Wireless Networks Using Dual Signature And Symmetric Key Protocol" International Journal of Computer Science and Communication (IJCSST), n Vol. 2, No. 2, July-December 2011, pp. 419-422 Jacek Cicho, Rafał Kapelko, Jakub Lemiesz, and Marcin Zawada "On Alarm Protocol in Wireless Sensor Networks", 2010 S. Sharmila and G. Umamaheswari, " Defensive Mechanism of Selective Packet Forward Attack in Wireless Sensor Networks", International Journal of Computer Applications (0975 – 8887) Volume 39– No.4, February 2012 Priyanka Goyal, Vintra Parmar and Rahul Rishi , " MANET: Vulnerabilities, Challenges, Attacks, Application" , IJCEM International Journal of Computational Engineering & Management, Vol. 11, January 2011 ISSN (Online): 2230-7893 2011 Donatas Sumyla, " Mobile Adhoc Networks" , IEEE Personal Communications Magazine, April 2003, pp. 46-55. Amandeep Singh Bhatia and Rupinder Kaur Cheema , "Analysing and Implementing the Mobility over MANETS using Random Way Point Model" , International Journal of Computer Applications (0975 – 8887) Volume 68– No.17, April 2013 Jeroen Hoebeke, Ingrid Moerman, Bart Dhoedt and Piet Demeester , " An overview of Mobile Adhoc Networks: Applications and challenges", Sint Pietersnieuwstraat 41, B-9000 Ghent, Belgium ,2005 Loukas Lazos, and Marwan Krunz, "Selective Jamming/Dropping Insider Attacks in Wireless Mesh Networks" Dept. of Electrical and Computer Engineering, University ofArizona, Tucson, Arizona, 2009 Jiazi YI , " A Survey on the Application of MANET" , 2005 Ian D. Chakeres and Elizabeth M. Belding-Royer , "AODV Routing Protocol Implementation Design", In C. E. Perkins, editor, Ad hoc Networking, pages 173.219. Addison-Wesley, 2004 Rusha Nandy, "Study of Various Attacks in MANET and Elaborative Discussion Of Rushing Attack on DSR with clustering scheme" Int. J. Advanced Networking and Applications Volume: 03, Issue: 01, Pages: 1035-1043 (2011) Tien-Ho Chen and Wei-Kuan, Shih , "A Robust Mutual Authentication Protocol for Wireless Sensor Networks" ETRI Journal, Volume 32, Number 5, October 2010 Vinit Garg, Manoj Kr.Shukla, Tanupriya Choudhury, Charu Gupta, "Advance Survey of Mobile Ad-Hoc Network," IJCSST Vol. 2, Iss ue 4, Oct . - Dec. 2011 		1-8
2.	Authors:	M. S. Harne, Manish M. Dandge	
	Paper Title:	OVAT Analysis for Surface Finish in CNC Turning	
	<p>Abstract: Metal cutting is one of the most important and widely used manufacturing processes in engineering industries and in today's manufacturing scenario, optimization of metal cutting process is essential for a manufacturing unit to respond effectively to severe competitiveness and increasing demand of quality which has to be achieved at minimal cost. Surface finish is one of the prime requirements of customers for machined parts. The purpose of this research paper is focused on the analysis of optimum cutting conditions to get lowest surface finish in facing by regression analysis. This paper presents an experimental study to investigate the effects of cutting parameters like Cutting speed, feed and depth of cut on surface finish on 16MnCr5H Steel</p>		9-12

	<p>Keywords: CNC Turning, Surface Finish, One Variable at a Time Analysis.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Jurkovic Zoran and Cukor Goran, "Improving the surface roughness at longitudinal turning using the different optimization methods" Technical Gazette 17, 4(2010) , pp 397-402. 2. Chahal Mandeep and Singh Vikram, To Estimate The Range Of Process Parameters For Optimization Of Surface Roughness & Material Removal Rate In CNC Milling", International Journal of Engineering Trends and Technology (IJETT), Vol 4 (10) 2013, pp 4556-4563 3. Makadia Ashvin J. and Nanavati J.I., "Optimisation of machining parameters for turning operations based on response surface methodology", Elsevier journal of measurement, Vol. 46, 2013, pp. 1521-1529. 4. Rao P N, "Manufacturing Technology Metal cutting and machine tools".Tata McGraw-Hill Publishing Co Ltd, 2000, pp 5-6. 5. Car Z. and Barisic B., "GA based CNC turning center exploitation process parameters optimization", METALURGIJA, Vol. 49 (1), 2009 pp 47-50. 6. Mahdaveinejad R.A. and Bidgoli H. Sharifi, "Optimization of surface roughness parameters in dry turning", Journal of Materials Processing of Achievements in Materials and Manufacturing Engineering, Vol. 27 (2), 2009, pp 571-577. 					
3.	<table border="1"> <tr> <td data-bbox="119 488 335 533">Authors:</td> <td data-bbox="335 488 1412 533">Kiran Singh, Chandasree Das</td> </tr> <tr> <td data-bbox="119 533 335 577">Paper Title:</td> <td data-bbox="335 533 1412 577">Analysis of DFIG Based Wind Turbine System during Different Types of Grid Fault</td> </tr> </table> <p>Abstract: The doubly fed induction generator (DFIG) based wind turbine(WT) system provides better power delivery towards the demand .This paper presents the performance of DFIG based wind turbine system during voltage dip caused due to different types of grid fault. Low-voltage ride-through (LVRT) capability of the system according to the grid connection requirement during these faults is studied and discussed in the paper. Further, power flow through the grid with different load conditions is compared and LVRT capability of the system is studied for each load condition. In addition to this, a 16 bus distribution system is connected to two generators and one DFIG based wind turbine system and the reactive power compensation is provided at two buses by using capacitors. The results obtained prove that due to the compensation provided the reactive power flow through those buses is reduced to a great extent and thereby improving systems stability and reliability. The design and response of the DFIG based wind turbine system during different fault conditions, various load conditions and integrated system consisting of DFIG based WT system and 16 bus distribution systems have been verified using MATLAB/ Simulink.</p> <p>Keywords: DFIG, Distrbution system, LVRT,Wind Turbine .</p> <p>References:</p> <ol style="list-style-type: none"> 1. Thomas, Wind Power in Power Systems. New York: Wiley, 2005. 2. D.Xiang, L. Ran, P. J. Tavner, and S. Yang, "Control of a doubly-fed induction generator in a wind turbine during grid fault ride-through,"IEEE Trans. Energy Convers., vol. 21, no. 3, pp. 652–662, Sep. 2006. 3. M. Rathi and N. Mohan, "A novel robust low voltage and fault ride through for wind turbine application operating in weak grids," inProc.IEEE Industrial Electronics Society Conf., Nov. 2005, pp. 6–10. 4. Hansen and G. Michalke, "Fault ride-through capability of DFIG wind turbines,"Renew. Energy, vol. 32, no. 9, pp. 1594–1610, Jul.2007. 5. J. Lopez, P. Sanchis, X. Roboam, and L. Marroyo, "Dynamic behavior of the doubly fed induction generator during three-phase voltage dips,"IEEE Trans. Energy Convers., vol. 22, no. 3, pp. 709–717, Sep. 2007. 6. L. Xu and P. Cartwright, "Direct active and reactive power control of DFIG for wind energy generation,"IEEE Trans. Energy Convers., vol.21, no. 3, pp. 750–758, Sep. 2007. 7. M. Rahimi and M. Parniani, "Transient performance improvement of wind turbines with doubly fed induction generators using nonlinear control strategy,"IEEE Trans. Energy Convers., vol. 25, no. 2, pp.514–525, Jun. 2010. 8. F. K. A. Lima, A. Luna, P. Rodriguez, E. H. Watanabe, and F. Blaabjerg, "Rotor voltage dynamics in the doubly fed induction generator during grid faults,"IEEE Trans. Power Electron.,vol. 25, no. 1, pp.118–130, Jan. 2010. 9. J. Liang, W. Qiao, and R. G. Harley, "Feed-forward transient current control for low-voltage ride-through enhancement of DFIG wind turbines,"IEEE Trans. Energy Convers., vol. 25, no. 3, pp. 836–843, Sep.2010. 10. Lihui Yang, Zhao Xu, Jacob Østergaard, Zhao Yang Dong and Kit Po Wong, "Advanced Control Strategy of DFIG Wind Turbines for Power System Fault Ride Through," IEEE Trans. Power system., vol. 27, no. 3, pp.713–722., May. 2012. 11. D. Hansen, P. Sørensen, F. Iov, and F. Blaabjerg, "Control of variable speed wind turbines with doubly-fed induction generators," Wind Eng., vol. 28, no. 4, pp. 411–434, 2004. 12. M. Tsili and S. Papathanassiou, "A review of grid code technical re- quirements for wind farms," IET Renew. Power Gen., vol. 3, no. 3, pp. 308–332, Sep. 2009. 	Authors:	Kiran Singh, Chandasree Das	Paper Title:	Analysis of DFIG Based Wind Turbine System during Different Types of Grid Fault	13-17
Authors:	Kiran Singh, Chandasree Das					
Paper Title:	Analysis of DFIG Based Wind Turbine System during Different Types of Grid Fault					
4.	<table border="1"> <tr> <td data-bbox="119 1579 335 1624">Authors:</td> <td data-bbox="335 1579 1412 1624">Nisha Malik, Rohit Khattar, Sukhvinder Malik, Amit Vatsh</td> </tr> <tr> <td data-bbox="119 1624 335 1668">Paper Title:</td> <td data-bbox="335 1624 1412 1668">Radio Link Analysis for 4G TD- LTE Technology at 2.3 GHz Frequency</td> </tr> </table> <p>Abstract: The Long Term Evolution (LTE) is the latest step in an advancing series of mobile telecommunications systems. In this paper, authors show interest on the link budgeting the information presented here will help readers understand how the budgeting will be done in LTE. This paper provides dimensioning of LTE for particular city. This will provides the number of cell count. Here we tell about a GUI MATLAB System for calculation of no. of resources required to provide services in particular area with optimum cost and better quality.</p> <p>Keywords: LTE, Throughput, Radio link Budget Time Division Duplexing, MAPL, Cell count</p> <p>References:</p> <ol style="list-style-type: none"> 1. Lte - The Umts Long Term Evolution from Theory To Practice 2nd Edition by Stefania Sesia , Issam Toufik, Matthew Baker 2. 3GPP TS 36.300 "Evolved Universal Terrestrial Radio Access (E-UTRA), Evolved Universal Terrestrial Radio Access Network (E-UTRAN). 3. LTE the Future of Mobile Broadband Technology by Verizon Wireless 4. "Long Term Evolution (LTE): an introduction," Ericsson White paper, October 2007. 5. Introduction to Graphical User Interface (GUI) MATLAB "http://ewh.ieee.org/r8/uae/GUI.pdf". 6. Dimensioning of LTE Network, Description of Models and Tool, Coverage and Capacity Estimation of 3GPP Long Term Evolution radio interface by Abdul Basit, Syed. February, 2009 	Authors:	Nisha Malik, Rohit Khattar, Sukhvinder Malik, Amit Vatsh	Paper Title:	Radio Link Analysis for 4G TD- LTE Technology at 2.3 GHz Frequency	18-23
Authors:	Nisha Malik, Rohit Khattar, Sukhvinder Malik, Amit Vatsh					
Paper Title:	Radio Link Analysis for 4G TD- LTE Technology at 2.3 GHz Frequency					

	7. 3GPP TS 24.302: "Access to the 3GPP Evolved Packet Core (EPC) via Non-3GPP Access Networks".	
	8. 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRAN); Radio Resource Control (RRC) Protocol Specification"	
	9. 3GPP TS 36.401: "Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Architecture Description"	
	10. LTE, The UMTS long Terms Evolution: From Theory to Practice	
	11. "Long Term Evolution (LTE) Technical Overview", Motorola. Retrieved July 3, 2010.	
5.	Authors:	Ramchandra Patil, Shivaraj Hublikar
	Paper Title:	Design and Implementation of Car Black Box with Collision Avoidance System using ARM
	<p>Abstract: This paper is proposed to develop a low cost system which provides solution to the existing automotive control issues. This system has two main principle components namely Vehicle to Vehicle Collision Avoidance Unit (VVCPU) is used to avoid crashing between vehicles and Black Box (BB) records the relevant details about a vehicle such as Engine Temperature, Distance from obstacle, Speed of vehicle, Brake status, CO2 Content, Alcohol content, Accident Direction, trip Time and Date. The design selects ARM 7 (LPC 2148) as embedded controller, UART (Universal Asynchronous Receiver Transmitter) is the common peripheral found on microcontrollers widely used for communication with the external devices and systems, I2C (Inter-Integrated Circuit) for on-board communication, Real Time Clock, Electrically Erasable Programmable Read Only Memory and GSM module.</p> <p>Keywords: Black Box, Collision Avoidance, UART, I2C Protocol, GSM</p> <p>References:</p> <ol style="list-style-type: none"> 1. Soundarraj.V, Rajasekar.L, "Design of Car Black Box Based on ARM", International Journal of Microsystems Technology and Its Applications (IJMTA) Vol-1, No-2 January-2013. 2. Prof. M.Nirmala, M. Dineshkumar, "Design and Implementation of Automotive Control Features using ARM", Volume 2, Issue 5, May 2013. 3. Datasheet of LPC2148, Rev. 01 — 7 September 2005 4. P. Ajay Kumar Reddy , P.Dileep Kumar , K. Bhaskar reddy, E.Venkataramana , M.Chandra sekhar Reddy, "Black Box for Vehicles" , International Journal of Engineering Inventions, Volume 1, Issue 7(October2012) PP: 06-12. 5. Dheeraj Pawar, Pushpak Poddar, "Car Black Box with Speed Control in Desired Areas for Collision Avoidance", Engineering, Technology & Applied Science Research, Vol. 2, No. 5, 2012, 281-284. 6. Kenneth J Ayala, 8051 Microcontroller, 3rd Edition. 7. M. A. Mazidi, J. C. Mazidi, R. D. Mckinaly, the 8051 Microcontroller and Embedded Systems, Pearson Education, 2006. 8. Varsha Goud, V.Padmaja, "Vehicle Accident Automatic Detection and Remote Alarm Device", International Journal of Reconfigurable and Embedded Systems (IJRES), Vol. 1, No. 2, July 2012, pp. 49-54. 9. USER MANUAL BlueBoard-LPC214X of NGX technologies. 	
6.	Authors:	C Ilayarasu, K Boopathy Bagan, S Kanithan
	Paper Title:	Performance Comparison for the Design of Discrete Fourier-Invariant Signals
	<p>Abstract: In this paper, the design methodology minimizes the difference between the signal and its spectrum using gradient based iterative method. The proposed method reduces the number of iterations and simulation time compared with the existing method. The novelty method of design includes discrete Fourier-invariant signals with minimum time-width (T) and bandwidth (B) product. These methods achieve theoretical Gabor lower bound on BT product. Finally, we show how the proposed discrete Fourier-invariant signals with minimum bandwidth time-width product are not affected by noise with the help of wavelet processing.</p> <p>Keywords: Eigenfunctions, Gabor uncertainty principle, shape invariant signals.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Lathi, B P signal processing and linear systems, Berkeley-Cambridge press, Carmichael, CA 1998. 2. L. R. Soares, H. M. de Oliveira, R. J. S. Cintra, and R. C. de Souza, "Fourier eigenfunctions, uncertainty gabor principle, and isoresolution wavelets," in Symp. Brasileiro de Telecomun., Rio de Janeiro, 2003. 3. P. P. Vaidyanathan, "Eigenfunctions of the Fourier transform," IETE J. Educ., vol. 49, pp. 51–58. 4. Discrete Fourier-Invariant Signals: Design and Application, Maja Temerinac-Ott, Member, IEEE, and Miodrag Temerinac, Senior Member, IEEE. IEEE TRANSACTIONS ON SIGNAL PROCESSING, VOL. 60, NO. 3, MARCH 2012 5. B. Santhanam and T. Santhanam, "Discrete Gauss-Hermite functions and eigenvectors of the centered discrete Fourier transform," in Proc. IEEE Int. Conf. Acoust., Speech, Signal Process. (ICASSP 2007), Apr. 2007, vol. 3, pp. III-1385–III-1388. 6. S.-C. Pei and K.-W. Chang, "Generating matrix of discrete Fourier transform eigenvectors," in Proc. IEEE Int. Conf. Acoust., Speech, Signal Process. (ICASSP 2009), Apr. 2009, pp. 3333–3336. 7. M. T. Hanna, N. P. A. Seif, and W. Ahmed, "Discrete fractional Fourier transform based on the eigenvectors of tridiagonal and nearly tridiagonal matrices," Digit. Signal Process., vol. 18, pp. 709–727, 2008. 8. B. Dickinson and K. Steiglitz, "Eigenvectors and functions of the discrete Fourier transform," IEEE Trans. Acoust., Speech, Signal Process., vol. 30, no. 1, pp. 25–31, Feb. 1982. 9. S.-C. Pei, W.-L. Hsue, and J.-J. Ding, "Discrete fractional Fourier transform based on new nearly tridiagonal commuting matrices," IEEE Trans. Signal Process., vol. 54, no. 10, pp. 3815–3828, Oct. 2006. 10. C. Candan, "On higher order approximations for Hermite-Gaussian functions and discrete fractional Fourier transforms," IEEE Signal Process. Lett. vol. 14, no. 10, pp. 699–702, Oct. 2007. 11. J. Vargas-Rubio and B. Santhanam, "On the multiangle centered discrete fractional Fourier transform," IEEE Signal Process. Lett., vol. 12, no. 4, pp. 273–276, Apr. 2005. 12. E. Anderson, Z. Bai, C. Bischof, S. Blackford, J. Demmel, J. Dongarra, J.D. Croz, A. Greenbalm, S. Hammarling, A. McKenny, and D. Sorensen, LAPACK User's Guide, 3rd ed. Philadelphia, PA:SIAM, 1999. 13. GD. Gabor, "Theory of communication. Part I: The analysis of information," Elect. Eng.—Part III: Radio Commun. Eng. J. Inst., vol. 93, no. 26, pp. 429–441, Nov. 1946. 	
7.	Authors:	Aprajita Sharma, Ram Nivas Giri
	Paper Title:	Automatic Recognition of Parkinson's disease via Artificial Neural Network and Support Vector Machine
	<p>Abstract: Parkinson's Disease (PD) is the next mainly common neurodegenerative disease only exceeds by Alzheimer's Disease (AD). Parkinson's disease is a general disease of central nervous system along with the aged</p>	

person and its difficult symptoms introduce some complexities for the clinical diagnosis. Moreover, it is estimated to enlarge in the subsequently decade with accelerated treatment costs as an outcome. Medical results produces undesirable biases, faults and extreme clinical costs which influence the value of services offered to patients. Precise detection is extremely important for cure planning which can decreases the incurable results. Precise outcome can be achieved through Artificial Neural Network. In addition to being accurate, these methods must meet speedily in order to relate them for real time applications. Artificial Neural Network (ANN)-based diagnosis of medical diseases has been taken into great consideration in recent years.. In this paper three types of classifiers based on MLP, KNN, and SVM are used to support the experts in the diagnosis of PD. The dataset of this research is composed of a range of biomedical voice signals from 31 people, 23 with Parkinson’s disease and 8 healthy people. For this purpose, Parkinson's disease data set, taken from UCI machine learning database was used .The results show a high accuracy of around 85.294%.

Keywords: Artificial Neural Network, Parkinson’s disease, Pattern Recognition, Support Vector Machine.

References:

1. Beal, “Experimental models of Parkinson’s disease”, Nature Reviews Neuroscience, 2, 325–334, 2001.
2. A.H. Hadjahmadi & Taiebeh J. Askari, “A Decision Support System for Parkinson's Disease Diagnosis using Classification and Regression
3. Betarbet, R., Sherer, T. B., & Greenamyre, J. T., “Animal models of Parkinson’s disease. Bioessays”, 24, 308–318, 2002.
4. Manciocco, A., Chiarotti, F., Vitale, A., Calamandrei, G., Laviola, G., & Alleva, E., “The application of Russell and Burch 3R principle in rodent models of Neurodegenerative disease: The case of Parkinson’s disease”, Neuroscience and Biobehavioral Reviews, 33, 18–32, 2009.
5. E. Tolosa, G. Wenning, and W. Poewe, “The diagnosis of Parkinson's disease”, Lancet Neurology, 5(1):75 {86, 2006.
6. Singh, N., Pillay, V., & Choonara, Y. E., “Advances in the treatment of Parkinson’s disease. Progress in Neurobiology”, 81, 29–44, 2007.
7. Little, M. A., McSharry, P. E., Hunter, E. J., Spielman, J., & Ramig, L. O., “Suitability of dysphonia measurements for telemonitoring of Parkinson’s disease”, IEEE Transactions on Biomedical Engineering, 2008.
8. Anchana Khemphila, Veera Boonjing, “Parkinsons Disease Classification using Neural Network and Feature selection”, World Academy of Science & Tech, 64, 2012.
9. J. Jankovic, A.H. Rajput, M.P. McDermott, and D.P. Perl, “The evolution of diagnosis in early Parkinson disease”, Mar; 57 (3), 369-72, 2000.
10. Valluru B. Rao and Hayagriva Rao. 1995. C++, Neural Networks and Fuzzy Logic (2nd Ed.). MIS: Press, New York, NY, USA.
11. Alexander I. Galushkin. 2007. Neural Network Theory. Springer-Verlag New York, Inc., Secaucus, NJ, USA.
12. Shigeo Oyagi, Ryoichi Mori, Noriaki Sanechika Realization of a Boolean function using an extended threshold logic. Bulletin of the Electro technical Laboratory, Vol: 42, PP: 9–74, 1978.
13. I.A.Basheer, M.Hajmeer, Artificial neural networks: fundamentals, computing, design, and application, J.Microbiol. Meth. Vol:43, PP: 3–31, 2000.
14. B.B.Chaudhuri, U.Bhattacharya, ENcient training and improved performance of multilayer perceptron in pattern classification, Neurocomputing, Vol:34, pp: 11-27, 2000.
15. Hanbay, D., Turkoglu, I., & Demir, Y. (2008). An expert system based on wavelet decomposition and neural network for modeling Chua’s circuit. Expert Systems with Applications, Vol: 34, No:4, Pp: 2278–2283.
16. Tran Nguyen, Richard Malley, Stanley H. Inkelis, Nathan Kuppermann, Comparison of prediction models for adverse outcome in pediatric meningococcal disease using artificial neural network and logistic regression analyses, Journal of Clinical Epidemiology, Vol: 55, No: 7, Pp: 687-695, 2002
17. Center for Machine Learning and Intelligent Systems (2008)http://archive.ics.uci.edu/ml/datasets/Parkinsons
18. B.D. Ripley. Pattern recognition and neural networks. Cambridge university press, 1996.
19. S. Haykin. Neural Networks: A Comprehensive Foundation, Englewoods Cli@s, 1998.
20. CM Bishop. 1995. Neural Networks for Pattern, Recognition, Oxford: Oxford University Press.
21. C.J.C. Burges. A Tutorial on Support Vector Machines for Pattern Recognition. Data Mining and Knowledge Discovery, 2(2):121{167, 1998.
22. C. Cortes and V. Vapnik. Support-vector networks. Machine Learning, 20(3): 273{297, 1995).
23. M. Pal and University of Nottingham (GB). Factors Influencing the Accuracy of Remote Sensing Classification: A Comparative Study. University of Nottingham, 2002.
24. Chih-min ma, Wei- Shui Yang and Bor-Wen Cheng “How the Parameters of K-nearest Neighbor Algorithm Impact On The Best Classification Accuracy: In Case Of Parkinson’s Disease ” Journal of Applied Science 14(2):171-176, 2014.

Authors: Murari Lal Azad, Aizad Khursheed, Shubhranshu Vikram Singh

Paper Title: Operation and Control of Micro Sources in Island Mode of a Microgrid

8. **Abstract:** In the country like India where population is increasing at a rapid rate the electrical power demand has become a great problem. Unfortunately the conventional energy resources are limited, cause greenhouse emissions and are expected to increase in costs due to an increase in the demand. Recently, the new concept of MicroGrid has been emerging on distribution network for integration of micro generation in low voltage network and to increase the reliability of supply. A microgrid is a cluster of micro generators, loads, storage devices, control devices and a low voltage distribution network functioning in a coordinated manner. The microgrid can operate in two different modes: interconnected or emergency. In first mode the microgrid is connected with the conventional low voltage distribution network for importing or exporting electricity. In emergency mode the microgrid is isolated (islanded) with the help of control devices from the distribution network and uses local micro-generators, changing from power control to frequency control. Most of the micro sources installed in a microgrid cannot be connected directly to the electrical network therefore; power electronics interfaces (dc/ac or ac/dc/ac) are required. Thus, the inverter control is also a challenge for smooth and reliable operation of a smart microgrid. This paper describes microgrid operation in various modes and various control strategies adopted.

Keywords: Frequency control, Islanded Operation, MicroGrid, reliability, Voltage Control.

References:

1. Lopes J.A.P, “Management of MicroGrids”, International Electrical Equipment Conference, Bilbao, October, 2003.
2. Lasseter, R. H., Akhil, A., Marnay, C., Stephens, J., Dagle, J., Guttromson, R., Meliopoulos, A., Yinger, R., and Eto, J. (2002). “The CERTS microgrid concept.” White Paper for Transmission Reliability Program, Office of Power Technologies, U.S. Dept. of Energy, Washington, D.C. Lopes, J., Peças, A., Tomé Saraiva, J., Hatzigiargyriou, N., and Jenkins, N. (2003). “Management of microgrids.” Proc.,

	<p>JIEE Conf. 2003.</p> <p>3. D.C. Lopes, J., Peças, A., Tomé Saraiva, J., Hatzigryriou, N., and Jenkins, N. (2003). "Management of microgrids." Proc., JIEE Conf. 2003.</p> <p>4. Venkataramanan, G., Illindala, M. S., Houle, C., Lasseter, R. H. (2002) "Hardware development of a laboratory-scale microgrid. Phase 1: Single inverter in island mode operation." Rep. No. SR-560-32527, National Renewable Energy Laboratory, Golden, Colo.</p> <p>5. Williams, C. (2003). "CHP systems." Distributed Energy, 57-59. Zhang, H., Chandorkar, M., Venkataramanan, G. (2003). "Development of static switchgear for utility interconnection in a microgrid." Proc., Power and Energy Systems.</p> <p>6. Costa P.M., Matos M.A. "Reliability of Distribution Networks with Microgrids", Proceedings of PowerTech 2005, St. Petersburg, June 2005.</p> <p>7. S. Papathanassiou, D. Georgakis, N Hatzigryriou, A. Engler, Ch. Hardt, "Operation of a prototype Microgrid system based on MicroSource equipped with fastacting power electronic interfaces", 31th PESC, Aachen, June 2004.</p> <p>8. A. Engler, "Applicability of droops in low voltage grids", Der Journal NO. 1, January, 2005</p>	
9.	<p>Authors: Olasunkanmi F. Oseni, Segun I. Popoola, Robert O. Abolade, Oluwole A. Adegbola</p> <p>Paper Title: Comparative Analysis of Received Signal Strength Prediction Models for Radio Network Planning of GSM 900 MHz in Ilorin, Nigeria</p> <p>Abstract: The quality of coverage of any radio network design depends on the accuracy of the propagation model employed during planning and initial deployment. For efficient radio network design, the propagation models are estimated from signal strength measurement taken in the area of interest. In this paper, the suitability of Okumura-Hata model, COST 231-Hata model and Standard Propagation Model for radio coverage prediction on terrains of Ilorin City, Nigeria was investigated. Field measurement data were obtained from the GSM 900 radio network deployed in the area through drive test. The actual Received Signal Strength (RSS) values were compared with those obtained from model predictions in ATOLL network planning tool. The predictions of Standard Propagation Model gave the minimum Root Mean Square Error (RMSE) of 5.52 dB, 12.73 dB and 18.4 dB on BS2501, BS2502 and BS2503 respectively. The deviation of the mean RSS predicted by Okumura-Hata was found to be the highest when compared with that of the actual data collected. Therefore, the use of Standard Propagation Model in radio network planning at 900 MHz will deliver a better Quality of Service (QoS) to mobile users in these propagation environments.</p> <p>Keywords: Drive test, Propagation Model, Received Signal Strength, Radio Network Planning</p> <p>References:</p> <ol style="list-style-type: none"> T.L. Adebayo and F.O Edeko, "Characterization of Propagation Path Loss at 1.8 GHz: A Case Study of Benin-City, Nigeria", Research Journal of Applied Sciences, 1 (1-4), 2006, pp. 92-96 J.C. Ogbulezie, M. U. Onuu, J. O. Ushie, and B. E. Usibe, "Propagation Models for GSM 900 and 1800 MHz for Port Harcourt and Enugu, Nigeria" Network and Communication Technologies, vol. 2, No. 2, 2013, pp. 1-10. F.D. Alotaibi, "TETRA Outdoor Large- Scale Received Signal Prediction Model in Riyadh City-Saudi Arabia", IEEE Wireless and Microwave Technology Conference (WAMICON), USA, Dec. 2006, pp. 4-5. Ayeni, N. Faruk, O. Lukman, M. Y. Muhammad, and M. I. Gumel, "Comparative Assessments of Some Selected Existing Radio Propagation Models: A Study of Kano City, Nigeria", European Journal of Scientific Research, vol. 70, No. 1, 2012, pp. 120-127. S. Kolyaie, M. Yaghooti, and G. Majidi, "Analysis and Simulation of Wireless Signal Propagation Applying Egotistical Techniques, Archives of Photogrammetry", Cartography and Remote Sensing, vol. 22, 2011, pp. 261-270. L. Meiling, L. Nikolai, V. Guillaume, and D. I. R Guillaume "On Predicting Large Scale Fading Characteristics with the MR-FDPF Method", 6th European Conference on Antennas and Propagation (EECAP) Prague: Czech Republic, March, 2012. Joseph and I. G. Peter, "CDMA2000 Radio Measurements at 1.9 GHz and Comparison of Propagation Models in Three Built-Up Cities of South-South, Nigeria", American Journal of Engineering Research (AJER), vol.2, issue 5, pp. 96-106. H. Masahara, "Empirical Formula for Propagation Loss in Land – Mobile Radio Services", IEEE Transactions on Vehicular Technology, vol. 29, No 3, 1980, pp. 317 – 325. COST 231, "Urban Transmission Loss Models for Mobile Radio in the 900 & 1800MHz band", COST 231 TD (90) 119 Rev 2, The Hague, Netherlands, 1991. ATOLL 3.2.0 Model Calibration Guide, Release: AT 320_MCG_E2. Forsk, France. Available: www.forsk.com TEMS Investigation Release Note, ASCOM, Document: NT11-21089, www.ascom.com/networktesting, 2011. ATOLL 3.2.0 Radio Planning & Optimization Software User Manual, Forsk, France. Available: www.forsk.com S. I. Popoola and O. F. Oseni, "Performance Evaluation of Radio Propagation Models on GSM Network in Urban Area of Lagos, Nigeria", International Journal of Scientific & Engineering Research, vol. 5, issue 6, June 2014, pp. 1212-1217. Hyndman, Rob J. Koehler, Anne B. "Another look at measures of forecast accuracy". International Journal of Forecasting, 2006, pp. 679-688. doi:10.1016/j.ijforecast.2006.03.001 J. M. Bland and D. G. Altman, " Statistics Notes: Measurement Error.", Bmj, 312(7047), 1996, pp. 1654. Retrieved 22 November 2013. Walker, Helen, "Studies in the History of the Statistical Method" Baltimore, MD: Williams & Wilkins Co, 1931, pp. 24-25. Ajay R. Mishra, "Advanced Cellular Network Planning and Optimization 2G/2.5G/3G...Evolution to 4G", John Wiley & Sons Ltd., 2007. S.I Popoola and O.F Oseni, "Empirical Path Loss Models for GSM Network Deployment in Makurdi, Nigeria". International Refereed Journal of Engineering and Science, vol. 3, issue 6, 2014, pp. 85-94 I. Joseph and I.G Peter, "CDMA2000 Radio Measurements at 1.9 GHz and Comparison of Propagation Models in Three Built-Up Cities of South-South, Nigeria", American Journal of Engineering Research (AJER), 2013, vol 02, issue 05, pp. 96-106. 	45-50
10.	<p>Authors: Priti Sharma, Tazeem Ahmad Khan, B. R. Vishwakarma</p> <p>Paper Title: Tunnel Diode Loaded Rectangular Microstrip Antenna with Passive Components for Millimeter Range</p> <p>Abstract: The present work describes the circuit model based analysis of tunnel diode(Active Device) loaded microstrip antenna with parasitic elements using equivalent circuit concept. To optimize the antenna characteristics a study has been carried out as a function of tunnel diode space with microstrip patch. It is observed that the antenna can be operated over a range of frequency form 39.163GHz to 57.688GHz for Germanium tunnel diode loaded patch just by varying the value of passive elements. The return loss improves to -43.3dB.</p> <p>Keywords: Microstrip Antenna; Active tunnel diode loaded patch and passive elements patch,</p> <p>References:</p> <ol style="list-style-type: none"> S. PSylvesten P. Gentile, "Basic Theory and Application of Tunnel Diode", Princeton, NJ: Van Nostrand, 1962. D. M. Pozar, "Input impedance and mutual coupling of rectangular microstrip antennas", IEEE Trans. On Antenna and propagation, Vol. AP-30, 1982, pp. 1190-1196. 	51-53

	<ol style="list-style-type: none">3. M. V. Schneider, "Microstrip lines for microstrip integrated circuits," Bell Syst. Tech. J., vol. 48, 1969, pp. 1424-1444.4. Rakesh N. Tiwari¹, Prabhakar Singh², "Tunnel Diode Loaded Microstrip Antenna with Parasitic Elements" Journal of Electromagnetic Analysis and Applications, 2012, 4, 177-1815. Yogesh Kumar Gupta¹, R. L. Yadava², R. K. Yadav³, Performance Analysis of 2.3 GHz Microstrip Square Antenna Using ADS International Journal of Research in Management, Science & Technology (E-ISSN: 2321-3264) Vol. 1; No. 2, December 20136. shweta srivastava & Babau R. Vishwakarma, "Tunnel diode loaded integrated two layer microstrip patch antenna", Indian journal of Radio & space physics vol 29, December 2000, pp.349-356.7. W. F. Woo, F. Chow, Principal of Tunnel Diode Circuits, Wile', 1964.	
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