Dr.N.ARUN VIGNESH
Associate Professor- ECE
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Areas of Interest: Wireless Commuication, Networking, Signal Processing

Education

- Ph.D., Anna University, Chennai, 2016
- M.E., Anna University, Chennai, 2011
- B.E., Anna University, Chennai, 2009

Academic/Industrial Experience

1. Associate Professor, Electronics and Communication Engineering, GRIET, Hyderabad, 2016-Present
2. Assistant Professor, Electronics and Communication Engineering, PPGIT, 2010-2016

Grants

AICTE (Prerana) - 9.23 Lakhs

Patent

Title of Invention : MRI Tumor Image Retrieval for supporting Computer Aided Diagnosis
Patent number: 201841015904
Status : Published
Title of Invention : System and method to monitor and forecast water consumption in premises
Patent number: 202041001100
Status : Published

Publications

1. N.Arun Vignesh and P.Poongodi, "Analysis of localized Quality of Service improvement architecture for wireless LAN", Wireless Personal Communications, Springer,vol. 86, no. 4,pp 1-11,2016.
2. N.Arun Vignesh and P.Poongodi, "A Cluster Based Network Architecture Scheme for QoS Improvement in WLAN", International Journal of Networking and Virtual Organisations, Vol 17, no 2/3,2017.
3. N.Arun Vignesh, D. Jayanthi, V. Ayyem Pillai & B Shilpa "Improving the performance of Quality of Service parameters using mobile node positioning algorithm in WLAN", Jour of Adv Research in Dynamical & Control Systems, ISSN: 1943-023X, Vol. 10, Issue-5, pp 1302-1309, 2018.
4. N.Arun Vignesh and P.Poongodi, "Dynamic Performance of an Enhanced Cooperative Strategy for QoS Improvement In WLAN" International Journal of Computer Networks and Wireless Communications (IJCNWC), ISSN: 2250-3501 Vol.6, No 2, Mar-Apr 2016.
5. H Joshi, D. Jayanthi, N. Arun Vignesh & K Jamal, "Hardware Security for Digital Circuits from Hardware Trojans", International Journal of Pure and Applied Mathematics , ISSN: 1314-3395, Volume 119 No. 17 2018,pp 3169-3177

6. P Abhisai, D. Jayanthi, N. Arun Vignesh & Maheswari, "Implementation of XOR and Edge Identification Method in Steganography", International Journal of Pure and Applied Mathematics, ISSN: 1314-3395, Volume 119 No. 17 2018, 3253-3260

7. N.Arun Vignesh and D.Jayanthi, "Design of FIR filter architecture using Manifold Steady method", International Journal of Latest Engineering and Management Research, vol. 2, no. 8,2017.

8. B Shilpa & N Arun Vignesh, "Design and Analysis of Broadband Printed Compact Antenna for WLAN", IJCRT, Volume 6, Issue 2, ISSN: 2320-2882, 2018.

9. N.Arun Vignesh and Banupriya.S, "Vampire detection to improve quality of service in wireless networks", International Journal of Research in Electronics, ISSN: 2349-252X, Vol. 02, Issue-1, 2015.

10. Kanithan, S., Vignesh, N.A. , Karthikeyan, E., Kumareshan, N., "An intelligent energy efficient cooperative MIMO-AF multi-hop and relay based communications for Unmanned Aerial Vehicular networks", Computer Communications, Volume 154, 15 March 2020, Pages 254-261, 2020

11. Monika, M.K., Vignesh, N.A., Panigrahy, A.K., Kumari, C.U., "Survey on localization techniques in wireless sensor networks ", Test Engineering and Management 82, 2766 – 2772, 2020

12. Laxmi Lydia, E., Murthy, A.S.D., Kumari, C.U., Vignesh, N.A., Padma, T., "Health care protection and empowerment of Internet of Things (IoT) through big data ", Test Engineering and Management Volume 82 Page Number: 1187 - 1196 Publication Issue: January-February 2020

13. Usha Kumari, C., Kora, P., (…),Arun Vignesh, N., "Feature Extraction and Detection of Obstructive Sleep Apnea from Raw EEG Signal", International Conference on Innovative Computing and Communications, 425-433, 2020

14. Usha Kumari, C., Panigrahy, A.K., Arun Vignesh, N. , "Sleep Bruxism Disorder Detection and Feature Extraction Using Discrete Wavelet Transform", Proceedings of ICETIT 2019, 833-840,2020

15. Kumareshan, N., Prakash, N., Arun Vignesh, N., Kumaran, G., "Performance analysis of various routing protocols for VANET environments", International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume 8, Issue -12, 2019

16. Jasper, P.A., Jayanthi, D., Arun Vignesh, N., Maheshwari, K.G., "Implementation of xor and edge identification method in steganography", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-8 Issue-6S3, September 2019

17. Usha Kumari, C., Arun Vignesh, N., Panigrahy, A.K., Ramya, L., Padma, T., "Fungal disease in cotton leaf detection and classification using neural networks and support vector machine", International Journal of Innovative Technology and Exploring Engineering, Volume-8 Issue-10, August 2019

18. Varri, V.R., Arun Vignesh, N., Panigrahy, A.K., Usha Kumari, C.H., "Implementation of low density parity check system using probabilistic gradient descent bit flipping decoder", International Journal of Innovative Technology and Exploring Engineering, Volume-8 Issue-10, August 2019

19. SS Akhil, NA Vignesh, S Jayabalan et.al., "A Novel Approach for detection of the symptomatic patterns in the acoustic biological signal using Truncation Multiplier", 2019 2nd International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT), Vol 1, pg 49-53, IEEEXplore,2019.

20. S Kanithan, NA Vignesh, AK Panigrahy et.al.," A Survey on Energy Efficient Image Transmission in WSN", 2019 2nd International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT), Vol 1, pg 41-44,IEEE Xplore, 2019.

21. R Senthilkumar, GM Tamilselvan, S Kanithan, NA Vignesh, "Routing in WSNs Powered by a Hybrid Energy Storage System through a CEAR Protocol Based on Cost Welfare and Route Score Metric", INTERNATIONAL JOURNAL of COMPUTERS COMMUNICATIONS & CONTROL 14 (2), 220-239, 2019.

22. TS Kumar, DG Padhan, V Sreehari, NA Vignesh, "Experimental Verification of Closed Loop Speed Control of PMSM using DSP 2407", International Conference on Control, Power, Communication and Computing Technologies (ICCPCCT), pg 152-156, IEEE, 2018.
23. DG Padhan, TS Kumar, V Sreehari, NA Vignesh, "A Hybrid Tuning of PIλDμController for Second Order Process with Delay", International Conference on Control, Power, Communication and Computing Technologies (ICCPCCT), pg 460-463, IEEE, 2018
24. NA Vignesh, S Bagade, S Veeramachneni, TS Kumar, DG Padhan, "Design and Analysis of planar inverted Leaf antenna for WLAN applications", International Conference on Computer Communication and Informatics (ICCCI), pg 1-3, IEEE, 2019.
25. B Shilpa, AB Joseph, NA Vignesh, N Kumareshan, "A brief Review on techniques used for Breast cancer detection using antennas", pg 1-3, IEEE, 2020.

Workshops Attended (Selected)

1. Workshop on IPV6, PSGTech, 2012
2. Workshop on Internet of Things, NGPTech, 2015
3. Pedagogy for Online and blended teaching-learning, IIT Bombay,2017
4. Hands on training on CST Studio Suite and Antenna Magus, GRIET, 2018
5. Elite Certificate for Antennas, IIT Bombay, 2019
6. Artificial Intelligence, Coursera, 2020
7. Research metrics in scientific publication, MLRIT, 2020
8. Latex Workshop, IIT Bombay, 2020

Workshops Organized

1. Two days event on 'National Network Security Championship' at PPGIT in association with IIT Delhi (2013)
2. Organized 4 one day National Workshops and an International Conference at PPGIT on the following topics 'Building Programming based Robots and Automation', 'Telecommunication & Control Engineering', 'Entrepreneurship development program', 'Recent Trends in Optical Communication'(2011-2016)
3. Organized 7 days training on 'Designing of Antennas and Microwave components using CST and Antenna Magus' , at GRIET, 2018
4. Webinar on Analog VLSI Design Flow:Specs to Final Product from Industry Perspective,2020
5. Advances in transform techniques for Signal Analysis, GRIET,2020

Reviewer

1. Journal of Supercomputing, Springer
2. Neural Computing and Applications, Springer
3. Cluster Computing, Springer
4. Journal of Medical Systems, Springer
5. Materials Today, Elsevier
6. Computers and Electrical engineering, Elsevier