Dr.S.Bhavani,
Professor,
Department of ECE,
Sri Shakthi Institute of Engineering and Technology,
Coimbatore- 641062.

#### **Patents Published:**

- 1. The patent titled "INTELLIGENT VEHICLE DOOR MONITORING SYSTEM AND A METHOD TO CONTROL THE SAME" has been published on 2/8/2019
- 2. The patent titled "ADHESION TESTING MACHINE" has been published on 01.02.2019
- **3.** The patent titled "HELMET SANITIZING MACHINE" has been published on 29/03/2019.

### **Book Chapter:**

**1. Satya**wati S Magar, Bhavani Sridharan, "Comparative Analysis of Biomedical Image Compression Using Oscillation Concept and Existing Methods", Computational Vision and Bio Inspired Computing,pp 205-214,(**Springer**)

#### **Journal Publications:**

#### Academic Year 2019-20 (May 2019 to August 2020) (Scopus-2, SCI-0)

- 1. Sreejith Damodaran and Dr.S.Bhavani, "PIR Sensor based Motion detection using fuzzy controller" International Journal of Recent Technology and Engineering Health and Technology, Springer, Vol No 8, Issue 1S5.,pp: 232-235, 2277-3878, June 2019 (Scopus).
- 2. G.R.Mahendrababu and S.Bhavani, "Primitive cells using Gate diffusion Input technique: A low power approach" International Journal of Recent Technology and Engineering Health and Technology, Springer, Vol No 8, Issue 1S5.,pp: 257-260, 2277-3878, June 2019 (Scopus).

# Academic Year 2018-19 (May 2018 to April 2019) (Scopus-11, SCI- 1)

**1.** Satyawathi Magar and Dr.S.Bhavani," Hybrid image compression technique using oscillation concept & quasi fractal" Health and Technology, Springer, Vol No 7, Issue 3,pp: 236-238, 2227-524X, 19<sup>th</sup> April 2019 (SCI).

- 2. J. Shafiq Mansoor, Dr.S. Bhavani and P. Sasikala, "On Board Diagnostics (OBD) based AC Monitoring System Using Internet of Thing (IoT)" Jour of Adv Research in Dynamical & Control Systems, Special issue 15, pp: 730-734, November 2018.(Scopus)
- **3.** M.Daranikumar, T.S.Aravinth and Dr.S.Bhavanii, "A Scheme for Delay Reduction in Double Tail Comparator for Low Power Applications" Jour of Adv Research in Dynamical & Control Systems, Special issue 15, pp: 721-725, November 2018.(Scopus)
- **4.** T.S.Aravinth ,M.Daranikumar, and Dr.S.Bhavanii, "Design of Signal Feed-through Pulse Triggered Dual Dynamic Flip-Flop for Low Power" Jour of Adv Research in Dynamical & Control Systems, Special issue 15, ,pp: 714-720, November 2018.(Scopus)
- **5.** Satyawathi Magar and Dr.S.Bhavani," Optimization before biomedical image compression using CLAHE and DCS" International journal of Engineering & Technology, Vol No 7, Issue 3,pp: 236-238, 2227-524X, September 2018 (Scopus)
- Deepaliparag Adhyapak Sridharan Bhavani, "Combination of grid and force based sensor deployment method for wireless sensor network" Sensor Letters, American scientific publishers, Vol 16,Issue 6 pp 472-477,ISSN: 1546-1971, http://doi.org/10.11591/ijeecs.v10.i3.pp1287-1295.June 2018(Scopus)
- Deepaliparag Adhyapak Sridharan Bhavani, "Fuzzy Clustered Ant based Cross Layered Wireless Multimedia Sensor Network for Quality of Service Parameter" Sensor Letters, American scientific publishers, Vol 16,Issue 16 pp 368-373,ISSN: 1546-1971, <a href="http://doi.org/10.11591/ijeecs.v10.i3.pp1287-1295.,June">http://doi.org/10.11591/ijeecs.v10.i3.pp1287-1295.,June</a> 2018(Scopus)
- 8. Deepaliparag Adhyapak Sridharan Bhavani, "Ant based cross layered optimization protocol for WMSN with fuzzy clustering" Indonesian journal of electrical Engineering and computer science, Vol 10,Issue 1 pp 295-301,2018(Scopus)
- 9. Deepaliparag Adhyapak Sridharan Bhavani, "Swarm based cross layer optimization protocol for WMSN" Indonesian journal of electrical Engineering and computer science, Vol 10,Issue 1 pp 302-308,2018 (Scopus)
- 10. Deepaliparag Adhyapak Sridharan Bhavani, "Grid & Force Based Sensor Deployment Methods in WSN Using PSO" Indonesian journal of electrical Engineering and computer science, Vol 10,Issue 1 pp 271-279, 2018(Scopus)

- 11. Deepaliparag Adhyapak Sridharan Bhavani, "Random, PSO & MDBPSO based sensor deployment in WSN" Indonesian journal of electrical Engineering and computer science, Vol 10,Issue 1 pp 286-294, 2018.(Scopus)
- 12. Syed jamesha and Dr.S.Bhavani "Improved secured route authentication in MANETs using secure location algorithm" Journal of advanced research in dynamical and control systems, Vol. 9 No: 8, pp 2315-2333, 2018(Scopus)

## Academic Year 2017-18 (May 2017 to April 2018) (Scopus-16, Peer reviewed-1, SCI-1)

- 1. Dr.S.Bhavani, P.Ligisha," Pelvic bone fracture detection using BPNN Journal of Advanced Research in Dynamical and Control systems" special issues on recent trends in engineering and managerial excellence 69-74 volume: issue: 03 May 2017(Scopus).
- Dr.S.Bhavani N.Suresh kumar "Design and development of fuzzy based reliable scheme foe energy efficiency in MANET", ARPN Journal of Engineering and Applied Sciences Vol12 NO.9 May 2017(Scopus)
- 3. Dr.S.Bhavani N.Suresh kumar "RERMRS: residual Energy based reliable multipath routing scheme for increasing network life time in MANET" International journal applied engineering research Vol12 NO.9 May 2017( Scopus)
- 4. Dr.S.Bhavani Mr. Mahesh Navale "Comparative Analysis of Vertical Handover Algorithms," International journal applied engineering research Vol13 NO.6,pp. 4583-4587, June 2017(Peer reviewed).
- K. Somu S. Bhavani "A Survey Of Network Partition-Based On QOS Improvement In MANETS" Pak. J. Biotechnol. Vol.14 (Special Issue II) Pp. 173- 177 (2017) Aug 2017(Scopus)
- Keerthiga Devi Bhavani, S. "Design And Testability Of Z-Ternary Content Addressable Memory Logic" Pak. J. Biotechnol. Vol. 14 (Special Issue II) Pp. 169-173 (2017) Aug 2017(Scopus)
- 7. K.Somu, Dr.S.Bhavani "Density Based Real Time Partition Avoidance Mechanism For QOS Development In Manet Using Region Proximity Technique" Jour of Adv Research in Dynamical & Control Systems, 14-Special Issue Aug 2017. (Scopus)
- 8. S.Arunrajan, **Dr.S.Bhavani**, "Optimal and Reliable Routing in Cooperative Communication based Wireless Sensor Network Environment with Collision

- Avoidance", Jour Of Adv Research In Dynamical & Control Systems, pp.: 303-313,2017,14-Special Issue, Aug 2017(Scopus).
- 9. K.Somu, **Dr.S.Bhavani**, "Density based real time partition avoidance mechanism for qos development in manet using region proximity technique", Jour of Adv Research in Dynamical & Control Systems, pp No: 52-62, Special issue 14, August 2017. (Scopus)
- 10. K.Somu, **Dr.S.Bhavani**, "Time to Live Based Network Partition Using Adaptive Time Synchronization in Mobile AdHoc Networks", International Journal of Pure and Applied Mathematics, pp No: 593-603, Vol 116, Issue No:21 -Special Issue, October 2017. (Scopus)
- 11. Mr.N.A.Natraj, **S.Bhavani**, "A CERTAIN INVESTIGATION ON SECURE LOCALIZATION ROUTING PROTOCOL FOR WSN", Journal of Theoretical and Applied Information Technology, Vol.No 95 (22), Pp. 6022-6031, November 2017. (Scopus)
- 12. Ms.SreelajaUniithan, **S.Bhavani**, "Cross layer enhanced mobile routing for Maximizing stability in MANET", International Journal of Control theory and applications, Vol.No 10 (20), Pp. 153-169, November 2017. (Scopus)
- 13. Ms. Vijitha, "S.Bhavani," Connection termination period based secure Warm hole detection scheme in MANET", International Journal of Control theory and applications, Vol. No 10 (19), Pp. 207-220, November 2017. (Scopus)
- 14. Ms.SreelajaUniithan, **S.Bhavani**," RMCMDCR-Resource managing checkpoint and selfish detection with cluster routing in ADHOC Network", International Journal of Pure and applied Mathematics, Vol.No 114 (7), Pp. 663-673, September 2017(Scopus)
- 15. Ms. Vijitha, **S.Bhavani**, "WNTFLEP-Worm Node Detection With Two Fish Algorithm Based Secure Routing And Link Expiry Prediction", International Journal of Pure and applied Mathematics, Vol.No 114 (7), Pp. 675-685, September 2017..(Scopus)
- 16. N.A.Natraj and **Dr.S.Bhavani**, "SSMDGS: SCHEDULING BASED STABLE MULTICAST DATA GATHERING SCHEME FOR WSN", ARPN Journal of Engineering and Applied Sciences, Vol 24, Issue No: 12, Dec 2017.(Scopus)
- 17. Mahesh Navale and Dr.S.Bhavani, "Simulation of Vertical Handover Algorithm for Seamless Connectivity using Advanced Cuckoo Search Algorithm,", International

- Journal of Applied Engineering Research, Vol 12, Issue No: 18,pp 7897-7901 Dec 2017.(Scopus)
- **18.** Syed jamesha and **Dr.S.Bhavani** A secure and efficient cluster based location aware routing protocol in MANET, Cluster Computing The Journal of Networks, Software Tools and Applications doi.org/10.1007/s10586-018-1703-4 January 2018(**SCI**)

# Academic Year 2016-17(May 2016 to April 2017) (Scopus-5, Peer reviewed-2, SCI-1)

- 1. Dr. S.Bhavani, K.G.Dharani" Design of Nanoscale memristive arrays for memory applications, Advances in Natural and applied Sciences, vol.no 24(3), pp. 328-331, June 2016.(Scopus)
- 2. Satyawathi Magar and Dr.S.Bhavani," Innovative approach to biomedical image compression using oscillation concept,,pp: 124-128, September 2016 (IEEE Explorer-SCI).
- 3. Dr. S.Bhavani, Saniya Ansari "Devanagari handwritten word recognition using efficient and fast feed Forward neural network classifier International journal of advanced research, vol.no 4(10), pp. 2034-2043, October 2016.(Scopus)
- 4. Dr. S.Bhavani, Ligisha.P" A survey on pelvic bone fracture detection, International journal of research in engineering and technology, vol.no 5(22), pp. 19-22, October 2016.(Scopus)
- 5. Dr. S.Bhavani, Babu.P" A Novel Control Strategy For Modified SL QZSI With Three Phase AC Grid Connected System, International journal of Control Theory and Applications, vol.no 9(31), pp. 219-230, October 2016.(Scopus)
- 6. Dr. S.Bhavani K.R.Joy" Improving Performance of IQA Algorithm: A Simplified Approach SSIM based on Image Gradients Indian Journal of Science and Technology, Vol 9(46), pp. 1-6, December 2016.(Scopus)
- 7. Dr. S.Bhavani S.Arunrajan "Optimized Energy Scheduling Algorithm for Energy Efficient Wireless Sensor Networks , International Journal of Electronic and Communication Engineering Vol:10, No:12,pp no: 1464-1467, December 2016.(Peer reviewed)
- 8. Satyawathi Magar and Dr.S.Bhavani, "An overview of different methods of digital image compression of medical images", IJIERT International Journal of Innovations in

Engineering Research and Technology, ICITDCEME-15, ISSN: 2394-3696, ,pp: 1-3, 2017 (Peer reviewed).

# Academic Year 2015-16(May 2015 to April 2016) (Scopus-4, Peer reviewed-3)

- 1. K.Vinothkumar and Dr. S.Bhavani, "An Effective Localization based optimized Energy Routing for MANET", Journal of theoretical and Applied Information Technology, Vol.no 77(2), pp. 291-299, July 2015.(Scopus)
- K.Vinothkumar and Dr. S.Bhavani, "Trust Based Multipath Authentication Protocol for Mobile Ad-Hoc Network", Journal of Computational and Theoretical Nano science, Vol.12 no 12, pp. 5479-5485, December 2015.(Scopus)
- 3. K.Vinothkumar and Dr. S.Bhavani, "Location based Multipath Routing Protocol for Network Connectivity in MANET", International Journal of Applied Engineering Research, Vol.no 10(1), pp. 129-144, 2015. (Peer reviewed)
- 4. K.Vinothkumar and Dr. S.Bhavani, "Effective Automated Routing scheme for Data integrity in MANET", International Journal of Soft Computing, Vol.no 10(6), pp. 408-414, December 2015.(Medwell)(Scopus)
- 5. K.Vinothkumar Dr. S.Bhavani, "An efficient Secured Localization based optimized Energy Routing for MANET", Indian Journal of Science and Technology, vol.no 8(35), pp. 1-7, December 2015.(Scopus)
- 6. Dr. S.Bhavani, "An Efficient Secure Intrusion Detection System for Data Integrity in MANET", International Journal of Applied Engineering Research, vol.no 10(15), pp. 35856-35861, 2015.(Peer reviewed)
- 7. Dr. S.Bhavani, "Light weight partition avoidance mechanism for QOS Improvement using dynamic random deployment strategy, Middle east Journal of Scientific Research, vol.no 24(3), pp. 534-540, March 2016. (Peer reviewed)

## Academic Year 2014-15(May 2014 to April 2015) (Peer reviewed-5)

 J.Abirami ,Dr.S. Bhavani," Design Of Monitoring System And Fault Diagnosis In Wind Turbine Based On CAN Bus" ,International Journal of science and Engineering Research, Vol 3 Issue 1, Jan 2015. (Peer reviewed)

- 2. Dr. S. Bhavani, Vinoth Kumar," Distributed Denial of Service (DDOS) Attack, Networks, Tools and DEFENSE" International Journal of Applied Engineering Research 10(8):20959-20971, January 2015(Peer reviewed)
- 3. K.Ananadh Kumar, Dr. S. Bhavani," Arm Based Intelligent Environment Monitoring And Control System Via Zig bee Network Using GPRS/SMS", International Journal of science and Engineering Research, Vol 3 Issue 1, Jan 2015. (Peer reviewed)
- 4. Dr.S. Bhavani, Vinothkumar," An effective localization based optimized energy routing for wireless sensor network", Middle-east journal of scientific research, Volume 23 Issue 05, April 2015. (Peer reviewed)
- 5. Dr.S.Bhavani, Mr.Natraj "A Hybrid Power Efficient Localization Scheme For Wireless Sensor Networks", International Journal of Applied Engineering Research. 2014, 9(23), pp.23219-23233,(ISSN: 0973-4562).(Peer reviewed)