## **DOCTORAL COMMITTEE MEMBER PUBLICATIONS**

## Dr. S. JANAKIRAMAN

Associate Professor,
Department of Banking Technology,
(Inter-disciplinary of CSE &Management), SOM,
Pondicherry University,
Puducherry 605 014.

E-mail: sj.dbt@pondiuni.edu.in

**Mobile:** +91 94433 76328

**Area of Specialization:** Image Processing ,Machine Learning ,Pattern Recognition, Big Data Analytics ,Computer Networks and Security.

## PAPERS IN REFEREED JOURNALS

- 1. S Gunasundari, S Janakiraman, S Meenambal, "Velocity Bounded Boolean Particle Swarm Optimization for improved feature selection in liver and kidney disease diagnosis", **Elsevier** Expert Systems with Applications 56, 28-47, 2016, ISSN 0957-4174. **IF 4.577, CARE Group A WoS, SCIE**
- 2. S Gunasundari, S Janakiraman, S Meenambal, "Multiswarm Heterogeneous Binary PSO using Win-Win approach for improved Feature Selection in Liver and Kidney disease Diagnosis", **Elsevier** Computerized Medical Imaging and Graphics Vol. 70, pp.135-154, Dec. 2018, ISSN: 08956111, **IF 3.29**, **CARE Group A PubMed, Scopus.**
- 3. N. Saravanaselvam, C. Devipriya, **S. Janakiraman**, "Soft Computing Based Fine Tuning and Clock Synchronization in Wireless Sensor Networks", **Springer** Wireless Personal Communications, Vol. 94, Iss. 4, pp 2229–2237, 2016, ISSN: 0929-6212, 1572-834X, Publisher **IF 0.701, CARE Group A WoS.**
- L. Jayakumar, S. Janakiraman, "A novel Need based free channel selection scheme for cooperative CRN using EFAHP-TOPSIS", Elsevier - Journal of King Saud University -Computer and Information Sciences, ISSN: 1319-1578, 2019 (In press), SNIP:1.897, CARE Group A, Scopus, ESCI.
- 5. L. Jayakumar, S. Janakiraman, "Optimal Spectrum-Hole Detection Scheme for Cooperative CRN Using Dynamic Weighted VIKOR", International Journal of Enterprise Information Systems (IJEIS)16(1), 2020 |Vol. 16 Iss. 1, pp. 1 24, ISSN: 1548-1115, EISSN: 1548-1123. Indexed in ABDC, Cabell's Directory, WoS ESCI, Scopus, CARE Group A
- 6. L. Jayakumar, Ankur Dumka, S. Janakiraman, "Energy aware Dynamic Mode Decision for Cellular D2D Communications by using Integrated Multi-Criteria Decision Making model", International Journal of Ambient Computing and Intelligence (IJACI), publisher: IGI Global, ISSN: 1941-6237, Vol. 11, Issue. 3, Article 7 2020. Indexed in WoS ESCI, Scopus, Cabell's Directory, CARE Group A
- 7. Bejoy B J, Janakiraman S, 2018, "A Generic Framework for Intrusion Detection using Cyber Immune Systems", Journal of Web Engineering, Vol. 17, No.6, pp. 2757-2768, ISSN: 1540-9589 (Print); ISSN 1544-5976 (Online), CARE Group A, SCIE (IF 0.311).
- 8. Saravanan, D., **S. Janakiraman**, K. Chandraprabha, T. Kalaipriyan, R. S. Raghav, and S. Venkatesan. "Augmented Powell-Based Krill Herd Optimization for Roadside Unit Deployment in Vehicular Ad Hoc Networks." Journal of Testing and Evaluation 47 (6), https://doi.org/10.1520/JTE20180494, **IF: 0.734,** ISSN: 0090-3973, **CARE Group A WoS, SCI, SCIE, Scopus.**

- S Gunasundari, S Janakiraman, S Meenambal, "Embedded Binary PSO Integrating classical methods for Multilevel Improved Feature Selection in liver and kidney disease diagnosis", International Journal of Biomedical Engineering and Technology, ISSN online: 1752-6426, ISSN print: 1752-6418, Article in Press, Published in online, Inderscience Publishers. CARE Group A - WoS.
- 10. Nallasivan G, **Janakiraman S.**, "Analysis of CT lung images using orthogonal moment features", International Journal of Biomedical Engineering and Technology, 24(2), pp. 121–132, ISSN online: 1752-6426, ISSN print: 1752-6418, **Inderscience** Publishers. **CARE Group A WoS**.
- 11. Suthir S, Janakiraman S, 2017, "SNT Algorithm and DCS Protocols coalesced a Contemporary Hasty File Sharing with Network Coding Influence" in Journal of Engineering Research, ISSN: 2307-1877, CARE Group A WoS, SCIE, Scopus.
- 12. H. Paulin, R. Milton, S. JanakiRaman, and K. Chandraprabha, "Audio—Visual (Multimodal) Speech Recognition System Using Deep Neural Network," Journal of Testing and Evaluation, Vol. 47 (6) (in press). <a href="https://doi.org/10.1520/JTE20180505">https://doi.org/10.1520/JTE20180505</a>. IF: 0.721, CARE Group A WoS, SCI, SCIE, Scopus
- 13. K. Umamaheswari, S. Janakiraman, and K. Chandraprabha, "Multilevel Hybrid Firefly-Based Bayesian Classifier for Intrusion Detection in Huge Imbalanced Data," Journal of Testing and Evaluation 49 (in press). <a href="https://doi.org/10.1520/JTE20180501">https://doi.org/10.1520/JTE20180501</a>. IF: 0.721, CARE Group A WoS, SCI, SCIE, Scopus
- 14. I.Manimozhi, S.Janakiraman, 2018, "Defect Detection in Pattern Texture Analysis Using Improved Support Vector Machine", Cluster Computing, https://doi.org/10.1007/s10586-018-2551-y, IF: 2.040, Springer US. CARE Group A WoS, SCIE, Scopus.
- 15. Sivakumar, V., **Subbiah Janakiraman**, and K. Chandraprabha. "Improving Energy Efficiency in Wireless Sensor Networks through Virtual-Backbone–Based Topology Control Mechanism", 2019/3/11, Journal of Testing and Evaluation, Vol. 47 (6), https://doi.org/10.1520/JTE20180411, **IF: 0.721, CARE Group A WoS, SCI, SCIE, Scopus.**
- 16. Manimozhi I, Janakiraman S, 2016, 'Defect Detection in Pattern Texture Analysis Based on Kernel Selection in Support Vector Machine', Indian Journal of Science & Technology, Vol. 9, Issue. 45, DOI: 10.17485/ijst/2016/v9i45/106501, ISSN: 0974-6846 CARE Group A WoS, SCIE, Scopus.
- 17. L. Jayakumar, S. Janakiraman, Ankur Dumka, "Energy Efficient Co-operative CRN Spectrum Sharing Using Multi-level hierarchical clustering with MCDM", Inderscience International Journal of Communication Networks and Distributed Systems (IJCNDS), Vol. 22, Iss. 2, pp.196-244, Feb—2018, ISSN: 1754-3924, CARE Group A WoS.
- 18. L. Jayakumar, Janakiraman S,T.P. Latchoumi, "A Novel Architecture for Next Generation Cellular Network Using Opportunistic Spectrum Access Scheme", Journal of Advanced Research in Dynamical and Control Systems (JARDCS) (1943-023X)—spl. issue (12)-pp.1388-1400 2017. (Indexed in SCOPUS)
- 19. L. Jayakumar, S. Janakiraman, "An Overview about Major Research Problems in Cooperative Cognitive Radio and its Feasible Solutions", International Journal of Control Theory and Applications (0974-5572), 9(19), pp. 9251-9265 2016. (Indexed in SCOPUS)
- 20. L.Jayakumar, Oviya. S, Shobana. R and S. Janakiraman, "A Novel Node Selection Function for Multilevel Hierarchical Clustering Scheme in Cooperative Cognitive Radio Networks", International Journal of Control Theory and Application, 9(3), 2016, pp. 221-233 2016. (Indexed in SCOPUS)
- 21. Jayakumar L., Janakiraman, S., Latchoumi, T.P., Shanthoshini, B., "Dynamic virtual server for optimized Web service interaction", International Journal of Pure and Applied Mathematics, Vol 117, Iss 19 Special Issue, 2017, Pages 371-376. **Scopus Indexed**

- 22. Bejoy B.J., Janakiraman S., "Artificial Immune System Based Intrusion Detection Systems-A Comprehensive Review", International Journal of Computer Engineering & Technology (IJCET), Vol. 8, Iss. 1, January-February 2017, pp. 85–95.
- 23. Bejoy B J, Janakiraman S, "Enhanced ais based intrusion detection system using natural killer cells", Cluster Computing, Springer (Accepted for publications 2018)
- 24. D Saravanan, V Agalya, J Amudhavel, S Janakiraman, "A Brief Survey on Performance Analysis and Routing Strategies on Vanets", Indian Journal of Science and Technology 9 (11), 2016. ISSN: 0974-6846, 0974-5645, **CARE Group A WoS.**
- 25. Victerpaul, P., Saravanan, D., Janakiraman, S., Pradeep, J. "Path planning of autonomous mobile robots: A survey and comparison", Journal of Advanced Research in Dynamical and Control Systems, Vol 9, Iss. Special Issue 12, 2017, Pages 1535-1565. **Scopus**
- 26. Rajasoundaran S, Narayanasamy P, Janakiraman.S, "A Hybrid Secure Routing and Monitoring Mechanism using Authorized and Concealed Arbitrary Watchdogs in Wireless Sensor Networks", Asian Journal Of Research In Social Sciences And Humanities, 6(8) Pg: 960-985, Published: Aug 2016.
- 27. S. Rajasoundaran, P. Narayanasamy and S. Janakiraman, "A Framework-The Secure Routing and Watchdog System with Multi-Channel Sigryption in Wireless Adhoc Sensor Networks", Asian Journal of Information Technology, 15(5), 916-920, 2016. DOI: 10.3923/ajit.2016.916.920. **Scopus Indexed**
- 28. Gayathri D., **Janakiraman S.**, "T2AR: trust-aware ad-hoc routing protocol for MANET", SpringerPlus2016, 5:995, **Springer, IF 0.982**, DOI: 10.1186/s40064-016-2667-6, Published: 7 July 2016, **Annexure I.**
- 29. D. Gayathri, and S. Janakiraman, "Comparative Performance analysis of Trust implemented AODV with AODV under the Black hole Attack in MANETs," International Journal of Research in Engineering and Technology IJRET, vol. 5(1), pp. 221-224, 2016.
- 30. D. Gayathri, and S. Janakiraman, "Impact of Black Hole Attack at Different positions in Trust Implemented AODV routed MANETs," International Journal of Emerging Technologies in Computational and Applied Sciences, vol. 1(16), pp. 50-53, 2016.
- 31. K.Umamaheswari, S. Janakiraman, "Intrusion Detection on Large Imbalanced Data using Hybridized Firefly Algorithm (HFA)", Journal Advanced Research and Dynamical Control System, Vol. 9, pp:1599-1612, 2017. Scopus
- 32. K.Umamaheswari, S. Janakiraman, "Machine Learning Algorithms in Network Intrusion Detection System" ARPN Journal of Engineering and Applied Sciences, Vol. 11,No.2, pp:1097-1100, January 2016, Scopus
- 33. K. Umamaheswari, S. Janakiraman, "Attack Detection System based on Hybridization of Data mining and Swarm intelligence Algorithms", International Journal of Applied Engineering Research, Vol. 10, No.85, 2015. Scopus
- 34. K. Umamaheswari, S. Janakiraman, "Simulation of Data mining Classifiers (Bayes, Function, Tree) using Weka", Jamal Academic Research Journal, Special Issue,pp:119-124, 2015.
- 35. Gowri J., Janakiraman S., "An Edge Exposure using Caliber Fuzzy C-means With Canny Algorithm", Indonesian Journal of Electrical Engineering and Computer Science, p-ISSN: 2502-4752, e-ISSN: 2502-4760 (Vol. 8, Issue 1, Oct 2017). **Scopus Indexed**.
- 36. Nallasivan G, **Janakiraman.S**, "A Simple Computational Approach for the Texture Analysis of CT Scan Images Using Orthogonal Moments", Circuits and Systems 7 (08), 1884, 2016.
- 37. Suthir S, Janakiraman S, 2017, "A Survey of Fast File Sharing System in Network" in International journal of Engineering Development and Research, Vol. 5, Issue: 2, pp. 1298-1304, ISSN: 2321-9939.
- 38. Suthir S, Janakiraman S, 2015, "A Malicious Discovery Exposure Scheme Towards Resourceful Reliance Authority in Delay Forbearing Network", in International Journal

- of Science, Technology & Management, Vol. 4, Issue. 03, pp. 228-233, ISSN: 2394-1529.
- 39. Indumathy.S., Janakiraman.S., Amuthavel, "Effects, Challenges, Opportunities and Analysis on Security Based Cloud Resource Virtualization", International Journal of Ad Hoc and Ubiquitous Computing, ISSN online: 1743-8233, ISSN print: 1743-8225, Accepted for publication, **Inderscience** Publishers. **Annexure I**.

## PAPERS IN REFEREED CONFERENCE PROCEEDINGS

- 1. D Saravanan, S Janakiraman, SS Roseline, MP Sharika, U Madhivadhani, "Efficient Route Discovery in VANET Using Binary Bat Approach", Proceedings of the International Conference on Soft Computing Systems, **Springer**, Advances in Intelligent Systems and Computing, Vol. 398, pp 529-536, 2016.
- 2. D Saravanan, S Janakiraman, PN Devy, T Sophia, M Mahalakshmi, "Enhancing the Interactivity in Distributed Interactive Applications", Proceedings of the International Conference on Soft Computing Systems, **Springer**, Advances in Intelligent Systems and Computing Vol. 398, pp 553-560, 2016.
- 3. Jayashri, C., Abitha, P., Subburaj, S., Devi, S.Y., Suthir, S., Janakiraman, S., "Big data transfers through dynamic and load balanced flow on cloud networks", Proceedings of the 3rd IEEE International Conference on Advances in Electrical and Electronics, Information, Communication and Bio-Informatics, AEEICB 2017, 7 July 2017, Article number 7972328, Pages 342-346. Scopus Indexed
- 4. Suthir, S., Janakiraman, S., Srividya, M., Anusha, N., "A contemporary network security technique using smokescreen SSL in huddle network server", Proceeding of IEEE 2nd International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics, IEEE AEEICB 20169 August 2016, Article number 7538376, Pages 673-676. **Scopus Indexed**
- 5. Umamaheswari.S., Janakiraman.S., "Comparison of classification accuracy using feature selection for network intrusion detection system", International Conference on RDICT, EGS Pillay Engineering College, 8 & 9th May 2015. ISBN 978 93 84893 24 8.
- 6. **Janakiraman**.S. et. al., "Contemporary and Efficient Shared Area Network in Peer-to-Peer Communication", Proceedings of IEEE International Conference on RADAR, Communication and Computing, **IEEE Xplore**, pp. 38 42, ISBN: 978-1-4673-2756-5.
- 7. Jayakumar L., S Janakiraman, "Enhanced Co-operative game model for Channel Selection in clustered opportunistic spectrum access", **IEEE** 9th International Conference on Intelligent Systems and Control (ISCO), 1-5, 2015. DOI: 10.1109/ISCO.2015.7282255.
- 8. L. Jayakumar, S. Janakiraman, T.P. Latchoumi, Latha parthiban, "A Novel Multi-Criteria Channel Decision in Co-operative Cognitive Radio Network Using E-TOPSIS", ACM International Conference, DOI: 10.1145/2980258.2982107–2016.
- 9. L.Jayakumar, S.Janakiraman "Improved History Based Channel Allocation Scheme for Cognitive Radio Network", IEEE World Conference on Futuristic Trends in Research and Innovation for Social Welfare (WCFTR'16), DOI: 10.1109/STARTUP.2016.7583900, Feb 2016.
- T.P. Latchoumi, L. Jayakumar, S. Janakiraman, Latha parthiban, "OFS method for selecting active Features using clustering techniques", ACM International Conference, DOI: 10.1145/2980258.2982108, 2016.
- 11. Gowri J., Janakiraman S., "Edge Detection based on K-means and Gabor Wavelet Technique", International Conference on Interdisciplinary Research in Electronics and Instrumentation Engineering 2015 (ICIREIE 2015), at Bharathiar University, Coimbatore on August 11 12, 2015.

- 12. D. Gayathri, and S. Janakiraman, "Comparative Performance analysis of Trust implemented AODV with Trust implemented OLSR under the Black hole Attack," International conference on Interdisciplinary Engineering 2015 (ICIREIE 2015), Bharathiar University, 2015.
- 13. D. Gayathri, and S. Janakiraman, "Extenuation of Black hole attacks by Trust," National Conference on Next GEN-X Computer Applications and Technology, SNMV College of Arts and Science, Coimbatore, 2016.
- 14. K. Umamaheswari, S.Janakiraman, "Birds Eye View of Swarm based Network Intrusion Detection System" National Conference on Next Gen-X Computer Applications and Technology (2016), SNMV College of Arts & Science, Coimbatore
- 15. K. Umamaheswari, S. Janakiraman, "Comparison of Classification accuracy using feature selection for Network Intrusion Detection System" International Conference on Research and Development in Information and Communication Technology (ICAESM 2015) at E.G.S. Pillay Engineering College, Nagaipattinam (ISBN No. 978-93-84893-24-8)
- 16. I.Manimozhi, S.Janakiraman, presented paper entitled 'Defect Detection in Pattern Texture Analysis Based on Kernel Selection in SVM', in 1st International Conference on Advanced and Intelligent Computing technologies organized by MVJ College of Engg., Bangaluru during 25 26th August 2016.