Name : Dr. (Mrs.) S.SIVAKUMARI

Designation : Professor and Head

Address (Official) : Department of Computer Science and Engineering

School of Engineering

Avinashilingam Institute for Home Science and Higher Education

for Women, Coimbatore – 641 108.

Mobile No. : 9791495527

E-Mail id : sivakumari_cse@avinuty.ac.in

Area of Specialization: Data mining, Cloud computing, Soft computing, Machine Learning

Publication Details of Last 5 years (2015 to till date)

- 1. ShreeNandhini.P, P.Amudha, **S.Sivakumari**,(2020) "Air Quality Prediction using Artificial Intelligence", International Journal of Innovative Technology and Exploring Engineering,vo.9, issue 5, pp. 1417-1420, ISSN. 2278-3075
- G.Vanitha, P.Amudha, S.Sivakumari, (2020) "Congestion Control in wireless Sensor Networks using Artificial intelligence Techniques", International Journal of Innovative Technology and Exploring Engineering, vo. 9, issue 5, pp. 1697-1699, ISSN. 2278-3075
- B.Sabeena, S.Sivakumari, P.Amudha,(2020) "Kernel based Principal Component Analysis based Dimensionality Reduction and Fuzzy Convolution Long Short-term Memory based Convolutional Neural Network (FCLSTM-CNN) for Parkinson's Disease Classification", Journal of Advanced Research in Dynamical & Control Systems, pp. 269-283, ISSN. 1943-023X
- 4. G. Bhavani, S. Sivakumari, (2020) "Improved Cuckoo Optimization Algorithm for Association Rule Hiding", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-10, August 2019
- 5. Bhavani, G. and **Sivakumari**, S. (2019). Quality Preserving ICOA for ARH. International Journal on Emerging Technologies, 10(4): 472–477
- Tamilmani G, Sivakumari S. Early detection of brain cancer using association allotment hierarchical clustering. Int J Imaging Syst Technol. 2019;1–16. https://doi.org/10. 1002/ima.22346. mpact factor: scopus indexed sci indexed

- 7. Nitha, K.P., **S.Sivakumari**, "Survey on Factors Determining the Share price Movement in Indian Stock Market- A Bigdata Approach", Indian Journal of Scientific Research in Computer Science, Engineering and Information Technology, Vol.5, Issue :1,pp.63 69, January February, 2019, (ISSN: 2456-3307)
- 8. D.Nithya, **S.Sivakumari**,"Categorizing the Significance of News Articles by Applying the Decision Stream" International Journal of Management Technology & Engineering, Vol.8, Issue: 9, pp. 2195 2203 (ISSN No: 2249-7455) UGC Approved Journal, 2018.
- P.Amudha, S.Sivakumari,"Disambiguating Technique for Protecting Data in Social Network" International Journal of Management Technology & Engineering, Vol. 8, Issue: 9, pp. 2024-2029 (ISSN No: 2249-7455) UGC Approved Journal, 2018
- 10. D.Nithya, S.Sivakumari,"Categorizing Online News Articles using Penguin Search Optimization Algorithm", International Journal of Engineering & Technology, Vol.7, Issue: 4, pp. 2565 2568 (ISSN No:2227-524X) Scopus Journal, 2018.
- 11. Sinduja, D.Nithya, **S.Sivakumari**, "Review Technique on Web Content Mining-Tools and Algorithms", International Journal of Innovative Research in Engineering and Technology, Vol:6, Issue: I,Pp.1 5,ISSN: 2320-981X, April, 2018.
- 12. M.Thenmozhi, **S.Sivakumari**,"Adaptive MAC Based Location Aware On- Demand Energy Efficient Routing Protocol (AMAC-LAODEERP) for Wireless Adhoc Networks",International Journal of Pure and Applied Mathematics,Vol.119,No.12,pp.14213 14223 (ISSN :1314-3395),2018,scopus indexed
- 13. K.E.Preethiga, G.Bhavani, S.Sivakumari, "A Survey on Preserving Data in Association Rule Hiding", International Journal of Innovative Research in Engineering Science and Technology, Vol.6, Issue: 1, pp.22 28 (ISSN2320-981X), April, 2018.
- 14. G.Bhavani, S.Sivakumari, "A Survey on Anonymizing Data in Graph based Multifold Model", International Journal of Innovative Research in Engineering Science and Technology, Vol.6, Issue: 1, pp.14 21 (ISSN2320-981X), April, 2018.
- 15. A.Snegaa, **S.Sivakumari**, R.Praveena Priyadarsini, "Study on Swarm Intelligence on Medical Field", International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Vol.3, Issue: 1,(ISSN: 2456-3307),2018.

- 16. S.Sivaranjani, M.Aasha, S.Sivakumari," Hot Spot Identification using Kernel Density Estimation for Serial Crime Detection, Advances in Intelligent Systems and Computing" vol.837, pp.253 265, 2018– Springer.
- 17. R.Ahila, **S.Sivakumari**, "A Survey on Security Issues in Cloud Environment", International of Research in Electronics and Computer Engineering ,ISSN:2348-2281, Vol.5, Issue: 2, pp.138 140, April-June, 2017.**Impact Factor: 0.543.**
- 18. P.Vigneswari, **S.Sivakumari**, "Study on Forward Error Correction Codes for Optical Networks", International Journal of Research in Electronics and Computer Engineering, ISSN:2348-2281, Vol.5, Issue: 2, pp. 130 134, April June, 2017.
- 19. D.Nithya, S.Sivakumari, "A Study on Web Mining Tools", International journal of Research in Electronics and Computer Engineering, ISSN:2348-2281, Vol.5, Issue:2, pp. 135 137, April-June 2017. D.Nithya, S.Sivakumari, "State of the Art of Web News Mining", International Journal of Computer Engineering & Applications, Vol. XI, Issue: VII, July 2017.
- 20. M.Thenmozhi, S.Sivakumari, "Wireless Adhoc Networks: A Survey of MAC based Routing Mechanism", International Journal of Computer Applications, ISSN: 0975-8887, Vol. 167, No. 3. June 2017.
- 21. S.Sivaranjani, **S.Sivakumari**, S. Maragatham, "GIS Based Serial Crime Analysis Using Data Mining Techniques" International Journal of Computer Applications (ISSN:0975–8887) Volume 153–No 8,2016.
- **22.** P.Amudha, S.Karthik, **S.Sivakumari**," An Experimental Analysis of Hybrid Classification approach for Intrusion Detection", Indian Journal of Science and Technology, PP.1-8, Vol.9, Issue:13,ISSN:0974-5645, April 2016.
- 23. G Bhavani, S Sangeetha, **S Sivakumari**, "Study: Protocols and Challenging Issues in IoT", World Scientific News,ISSN 2392-2192,Vol.41,pp.98-106,2016.
- 24. C.Indhu, S.Sivakumari, R.Praveena Priyadharsini, "Information Retrieval System for Internet of Things: A Survey", World Scientific News, Vol.41,pp. 91,ISSN: 2392-2192,2016.
- 25. Vishnu Priya, S.Sivaranjani, **S.Sivakumari**, "GIS Enabled Internet of Things Applications: An Overview ",World Scientific News, Vol. 41, pp: 143-149,ISSN 2392-2192, 2016.
- 26. M.Aasha, **S.Sivakumari**, "The Internet of Things A Survey", World Scientific News, Vol. 41,pp: 150-158,ISSN: 2392-2192, 2016.

- 27. Vishnu priya,S.Sivaranjani, **S.Sivakumari**, "A Survey on Crime Hotspot Analysis Techniques and Tools", International Journal of Innovative Research in Engineering Science and Technologies, Vol.4, Issue 2, pp. 153-158, May 2016, ISSN:2320-981X.
- 28. S.Sivaranjani, **S.Sivakumari**, "Crime Prediction and Forecasting in Tamilnadu using Clustering Approaches", IEEE Xplore Digital Library, Doi:10.1109/ICETT, 2016.7873764.
- 29. R.Praveena Priyadarsini, **S.Sivakumari,**P.Amudha," Enhanced L-Diversity Algorithm for Privacy Preserving Data Mining", Communications in Computer and Information Science, PP 14-23,Vol. 674, ISSN:1865-0929,Springer,Hindex: 29,2016.
- 30. G.Bhavani,S.Sangeetha , S.Sivakumari , "Ontology based Effective Semantic Information Retrieval for Big Data", Data Mining & Knowledge Engineering , Vol.8, Issue:4, pp: 115-119 , ISSN:0974-9683,2016.
- 31. M.Aasha, **S.Sivakumari**, "Efficient Gait Recognition of Individuals by Utilizing Shape Features using Particle Swarm Optimization", International Journal of Data Mining and Knowledge Engineering, PP:35-39, Vol. 8, No. 2, ISSN: 0974-9683, Feb 2016.
- 32. K.S.Sindhu, M.Aasha, **S.Sivakumari**, "A study on Technologies used for Implementation of Internet of Things", World Scientific News, Vol.41,pp.114-119, ISSN: 2392-2192,2016.
- 33. R.Praveena Priyadarsini, M.L.Valarmathi, **S.Sivakumari**, "Attribute Association Based Privacy Preservation for Multi Trust Level Environment", Sadhana Academy Proceedings in Engineering Science, PP.1-15., Vol. 41, ISSN: 0256-2499. (Indexed in Web of Science)
- **34.** P.Amudha, S.Karthik, **S.Sivakumari**, "Intrusion Detection using Artificial Bee colony with Reduced Features.", International Journal of Applied Engineering Research,pp:,Vol-10, PP.21125-21138No:41,ISSN:0973-4562, (2015),. (**Indexed in SCOPUS**)
- **35.** S.Sivaranjani, **S.Sivakumari**, "GIS Based Crime Hotspot Mapping and Analysis Using Radial Basis Function (RBF) and Interpolation Method", International Journal of Remote Sensing and Geoscience, PP.43-49, Vol.4, Issue 5, September 2015, ISSN: 2319-3484.
- 36. S.Sivaranjani, **S.Sivakumari**, "Mitigating Serial Hotspots on Crime Data using Interpolation Method and Graph Measures", International Journal of Computer Applications, PP.17-25, Vol. 126, September-2015, ISSN: 0975-8887.

- **37.** R.Praveena Priyadarsini,M.L.Valarmathi, **S.Sivakumari**, "Correlation Based Dependent, Independent and Reduced Slicing Algorithms for Privacy Preserving Data Mining", International Journal of Applied Engineering Research, pp.30580-30595,Volume 10, Number 41, ISSN 0973-4562, (2015).(**Indexed in SCOPUS**)
- **38.** S.Sivaranjani, **S.Sivakumari,**" Crime Hot Spot Analysis and Prediction using Spatial Data Mining Approaches A Review", International Journal of Applied Engineering Research, pp.7099-7108,Vol. 10, No. 3,ISSN 0973-4562, (2015).(**Indexed in SCOPUS**)
- 39. P.Amudha, S.Karthik, **S.Sivakumari**, "Intrusion Detection based on Core Vector Machine and Ensemble Classification Methods", International Journal of Applied Engineering Research,pp:30306-30310,Vol-10, No:41,ISSN:0973-4562, (2015), **Impact factor:1.8233(Indexed in SCOPUS)**
- **40.** PAmudha, S.Karthik, **S.Sivakumari**, "Intrusion Detection using Artificial Bee Colony with Reduced Features", International Journal of Applied Engineering Research, PP.21125-21138, Vol.10, No,8 ,ISSN:0973-4562, (2015), (**Indexed in SCOPUS**)
- 41. R.Praveena Priyadarsini, M.L.Valarmathi, **S.Sivakumari**, "Attribute Segregation based on Feature Ranking Framework for Privacy Preserving Data Mining ",Indian Journal of Science and Technology, pp.1-9,Vol. 8(17), 59772, August-2015,ISSN:0974-5645.
- **42.** M.Aasha, **S.Sivakumari**, "An Optimized Part based Gait Recognition using Multi-Objectice Particle Swarm Optimization", International Journal of Performability Engineering, PP:481-489,Vol:11,No.5,ISSN:097313, September, 2015.(**Indexed in SCOPUS**).**Impact Factor**: **0.54**.
- 43. P.Amudha, S.Karthik, **S.Sivakumari**, "Swarm Based Classifier Model Using Ensemble Feature Ranking Methods", ARPN Journal of Engineering and Applied Sciences, PP:8052-8059, Vol. 10, No. 18, ISSN: 1819-6608, October-2015, **H.Index:7**
- 44. P.Amudha, S.Karthik, S.Sivakumari, "A Hybrid Swarm Intelligence Algorithm for Intrusion Detection using Significant Feature", The scientific world journal, Vol.2015, Article ID:574589 ,PP.1-15, ISSN No:1537-744,(2015), Impact Factor:1.219
- 45. M.Aasha, **S.Sivakumari**, "An Efficient Gait based Recognition using Bat Algorithm", International Journal of Computer Applications, PP. 41-45, Vol. 123, No.9, ISSN.0975 8887, December 2015

46. S.Sivaranjani, S.Sivakumari, "A Novel Approach for Serial Crime detection with the Consideration of class Imbalance problem", Indian Journal of science and Technology, PP:1-9, Vol. 8, No.34, ISSN:0974-5645, December 2015.

Book Chapter

S.	Authors	Title of the Book	Paper title	ISBN	Publisher &
No.				no./pp.no.	Year
1.	P.Amudha, S.Karthik, S.Sivakumari	Handbook on Information Technology	Intrusion Detection Using Modified Artificial Bee Colony with Feature Subsets	978-93- 84443-46-7, pp. 173-182	Research India Publications, Delhi, India, 2016
2.	R.Praveena Priyadarsini, P.Amudha, S.Sivakumari	Digital Connectivity – Social Impact. Series: Communications in Computer and Information Science	Enhanced ℓ – Diversity Algorithm for Privacy Preserving Data Mining	978-981-10- 3273-8, vol. 679	Springer, Singapore, 2016
3.	P.Amudha, S.Sivakumari	Machine and Deep Learning Applications for Cyber Security	Hybridization of Machine Learning Algorithm in Intrusion Detection System	9781522596 110	IGI Global: International Publisher of Information Science and Research, USA, 2019

Book Published

- 1. P.Amudha, **S.Sivakumari**, Data LeakageDetection System, Lambert Academic Publishing, ISBN: 978-613-9-99886-9, 2019.
- 2. P.Amudha, **S.Sivakumari**, Classification Techniques for Intrusion Detection, Notion Press, 2 ISBN: 9781648285820, 2020