

**Dr. A. Amuthan Professor,**  
**Department of Computer Science and Engineering,**  
**Pondicherry Engineering College, Pondicherry**

**List of Publications (Last 5 years)**

1. S. Punitha, **A. Amuthan**, K. Suresh Joseph, "An Intelligent Artificial Bee Colony and Adaptive Bacterial Foraging Optimization Scheme for reliable breast cancer diagnosis," *Recent patents on computer science, Bentham Science, ISSN 2666-2558, Volume 13, 6 Issues, 2020, DOI : 10.2174/266625581399920061814370, June 2020. (Scopus)*
2. C. Kalaiarasy, N.Sreenath, **A.Amuthan**, "An Effective Variant Ring Signature-based Pseudonym Changing Mechanism for privacy preservation in Mixed Zones of Vehicular Networks", *Journal of Ambient Intelligence and Humanized Computing*, vol. 11, no.4, pp. 1669-1681, ISSN: 1868-5145, April 2020. **(SCI)**
3. **A. Amuthan**, R. Sendhil, "Hybrid GSW and DM based fully homomorphic encryption scheme for handling false data injection attacks under privacy preserving data aggregation in fog computing", *Journal of Ambient Intelligence and Humanized Computing*, ISSN 1868-5137, DOI 10.1007/s12652-020-01849-8, 2020.**(SCI)**
4. **A.Arulmurugan**, A.Amuthan, "Analytical Network Process-based Adaptive Cluster Head Selection Framework in WSN", *International Journal of Computer Science and Engineering*, Vol.7, Issue.12, ISSN: 2347-2693, December, 2019. **(Scopus)**
5. **A.Amuthan**, R.Kaviarasan, "Rank Criteria Improved Confidence-based Centroid Scheme for Non Line of Sight Node localizations in Vehicular Networks", *Journal of King Saud University – Computer and Information Sciences, Elsevier*, Vol.31, Issue.4, pp.415-560, ISSN: 1319-1578 , October 2019. Indexed by **(ESCI)**, **Cite Score: 3.12.**
6. Pillutla Harikrishna, **A. Amuthan**, "Adaptive Self Organizing Maps Inspired SDNBased DDoS (ASOM-SDN-DDoS) Mitigation Framework," *International Journal of Scientific & Technology Research*, Vol. 8, Issue 10, pp. 2257-2265, ISSN 2277-8616, Oct. 2019. **(Scopus)**
7. N. Arunachalam, **A. Amuthan**, "Adaptive and Optimized Meta-Heuristic Framework for Establishing QoS and Transaction Properties-based Dynamic Web Service Composition", *International Journal of Recent Technology and Engineering (IJRTE)*, Vol.8, Issue.3, pp. 7640 – 7644, ISSN:2277-3878, September 2019. **(Scopus)**
8. N. Arunachalam, **A. Amuthan**, "Integrated probability multi-search and solution acceptance rule-based artificial bee colony optimization scheme for web service composition", *Natural Computing*, Dol: doi.org/10.1007/s11047-019-09753-7, ISSN: 1572-9796, July 2019. **(SCIE)**
9. **A. Amuthan**, R. Kaviarasan, "Hybrid Multi-perspective NLOS Localization Framework (HM-NLOS-LF) for effective node localization in VANETs", *International Journal of Computer Sciences and Engineering*, Vol.7, Issue.6, pp.686-695, ISSN: 2347-2693, June 2019. **(UGC)**
10. N. Arunachalam, **A. Amuthan**, "A Survey on QoS aware Web Service Selection for

Reactive Service Composition”, *International Journal of Computer Sciences and Engineering (IJCSE)*, Vol.7, Issue 4, pp .581-587, ISSN: 2347-2693, Apr-2019, (UGC)

11. S.Udhaya Shree, **A.Amuthan**, K.Suresh Joseph, “Integrated Ant Colony and Artificial Bee Colony Optimization Meta Heuristic Mechanism for QoS-based Web Service Composition,” *Journal of Computational and Theoretical Nano science*, Vol. 16, Issue. 4, pp. 1444-1453(10), ISSN: 1546-1955, April 2019. Indexed by (ESCI)

12. Harikrishna Pillutla, **Amuthan Arjunan**, “Fuzzy Self Organizing Maps-based DDoS mitigation mechanism for Software Defined Networking in Cloud Computing,” *Journal of Ambient Intelligence and Humanized Computing*, <https://doi.org/10.1007/s12652-018-0754-y>, Vol.10, Issue:4, pp: 1547–1559, ISSN: 1868-5137, April 2019. (SCI)

13. N. Arunachalam, **A. Amuthan**, “A Survey on Meta-Heuristics Techniques for Web Service Composition”, *International Journal for Research in Engineering Application & Management (IJREAM)*, Vol.4, Issue.12, pp. 823 – 831, ISSN : 2454-9150, Mar 2019 (UGC)

14. N. Arunachalam, **A. Amuthan**, “A Survey on Degree of Exploration and Exploitation for Effective Web Service Composition”, *International Journal of Research in Electronics and Computer Engineering (IJRECE)*, Vol. 7, Issue. 1, pp. 2503 – 2510, ISSN : 2348-2281, 1 Jan - March 2019. (UGC)

15. A. Arulmurugan, A. Amuthan, “An Availability Predictive Trust Factor -based Semi-Markov Mechanism for effective Cluster Head Selection in Wireless Sensor Networks”, *International Journal of Communication Systems*, Wiley, DOI: 10.1002/dac.4298, ISSN: 2347-2693, 2019. (SCIE)

16. S. Punitha, **A. Amuthan**, K. Suresh Joseph, “Enhanced Monarchy Butterfly Optimization Technique for effective breast cancer diagnosis,” *Journal of Medical Systems*, vol. 43, Issue. 7, pp. 1–14, ISSN: 1573-689X, 2019. Impact Factor : 2.415 (Scopus).

17. S. Udhaya Shree, **A. Amuthan**, K. Suresh Joseph, “Grenade-Cauchy Operator Integrated Artificial Bee Colony Optimization for Reliable QoS based Web Service Composition”, *International Journal of Computational Systems Engineering*, Vol. 5, No. 3, pp.161 – 168, ISSN: 2046-3405, 2019. (ESCIE)

18. **A.Amuthan**, R.Kaviarasan, “Weighted Inertia-based Dynamic Virtual Bat Algorithm to detect NLOS nodes for reliable data dissemination in VANETs”, *Journal of Ambient Intelligence and Humanized Computing – Springer*, Vol. 10, Issue.11, pp.4603-4613, ISSN: 1868-5145, 29 Nov 2018. Indexed by (SCIE). **Impact factor :1.91**

19. N. Arunachalam, **A. Amuthan**, “Improved cosine similarity based Artificial Bee Colony scheme for reactive and dynamic service composition”, *Journal of king Saud University – Computer and Information Sciences*, Vol.30, Issue.4, pp.431-560, ISSN: 1319-1578, Oct. 2018. (ESIC), **Cite Score: 3.12**

20. S. Punitha, **A. Amuthan**, K. Suresh Joseph, “Benign and malignant breast cancer segmentation using optimized region growing technique,” *Future Computing and Informatics Journal*, vol. 3, no. 2, pp. 348–358, ISSN: 2314-7288, Oct 2018. (SCIE)

21. A. Arulmurugan, **A. Amuthan**, "Semi-Markov inspired hybrid trust prediction scheme for prolonging lifetime through reliable cluster head selection in WSNs", *Journal of King Saud University - Computer and Information Sciences, Elsevier*, doi.org/10.1016/j.jksuci.2018.07.006, ISSN: 1319-1578, 17<sup>th</sup> July 2018. (**ESCI**), **Cite Score: 3.12**
22. K. Deepa Thilak, **A. Amuthan**, 'Cellular Automata-based improved Ant Colonybased Optimization algorithm for mitigating DDoS attacks in Vehicular Ad-hoc Networks,' *Future Generation Computer Systems*, vol. 82, pp.304-314, ISSN: 0167-739X , May 2018. **Impact Factor: 5.768, (SCIE)**.
23. **Arjunan Amuthan**, Pillutla Harikrishna, "Mean Availability Parameter-based DDoS Detection Mechanism for Cloud Computing Environments," *In: Zungeru A., Subashini S., Vetrivelan P. (eds) Wireless Communication Networks and Internet of Things. Lecture Notes in Electrical Engineering*, vol 493, pp. 115-122, ISSN: 1876-1100, May 2018. (**Scopus**)
24. **A.Amuthan**, R.Kaviarasan, "Weighted Distance Hyperbolic Prediction-Based Detection Scheme for Non Line Of Sight nodes in VANETs," *Journal of King Saud University - Computer and Information Sciences, Elsevier*, Vol.30, Issue.12, pp.141-290 ISSN: 1319-1578, 3<sup>rd</sup> April 2018. Indexed by (**ESCI**), **Cite Score: 3.12**
25. **A.Amuthan**, K Deepa Thilak, "Improved Tabu Search based Cellular Automaton Inspired Algorithm for DDoS attacks in VANETs," *International Journal of Modern Electronics and Communication Engineering*, vol.5, no. 5, pp 25-34, ISSN: 2321-2152, October, 2017. (**UGC**)
26. **A.Amuthan**, K Deepa Thilak, "An Improved Stochastic Optimization Algorithm based on Cellular Automata for mitigating DDoS attacks in VANETs," *Journal of Advanced Research in Dynamical and Control Systems*, vol. 9, Issue. 14 – Special issue, pp. 155-177, ISSN: 1943-023X, October, 2017. (**Scopus**)
27. **A.Amuthan**, N.Sreenath, P.Boobalan, K.Muthuraj, "Dynamic multi-stage Tandem Queue modeling-based Congestion Adaptive Routing for MANET," *Alexandria Engineering Journal*, Vol.57, Issue.3, ISSN: 1110-0168, May 2017. **Impact Factor: 3.696, (SCIE)**.
28. K. Deepa Thilak , A. Amuthan, "Survey On Improved Artificial Bee Colony Algorithm For Balancing Exploration And Exploitation" *International Journal of Innovative Works in Engineering and Technology (IJIWET)*" , Vol. 3, Issue. 2, pp.192-200, ISSN: 2455-5797, April 2017. (Index Copernicus )
29. **A.Amuthan**, N.Sreenath, P.Boobalan, K.Muthuraj, "Hyper-Erlang Channel Allocation Factor-based QoS Enhancement Mechanism for Mobile Ad hoc Networks," *Alexandria Engineering Journal*, Vol. 57, Issue.2, pp.799-811, ISSN: 1110-0168, 2017. **Impact Factor: 3.696, (SCIE)**
30. **A.Amuthan**, R.Kaviarasan, "Trust Based Methodologies for Preventing Attacks In MANET- A Survey", *International Journal of Innovative Works in Engineering and Technology (IJIWET)*, Vol.3, Issue.2, pp.176-188, ISSN: 2455-5797, 2017. (**Index Copernicus** )