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## Publications

### Journals: Published

- [1] Abhishek Hazra, and Tarachand Amgoth, *Cost-efficient Computation Offloading of Green Industrial Fog Networks Using Graph Q-Learning*, **IEEE Transaction on Industrial Informatics: Accepted**, 2022. **IF: 10.215 (Q1)**.
- [2] Abishek Hazra, Praveen Kumar D., Tarachand Amgoth, and Schahram Dustdar *Cooperative Transmission Scheduling and Computation Offloading with Collaboration of Fog and Cloud for Industrial IoT Applications*, **IEEE IoT Journal: Accepted**, 2022. **IF: 9.462 (Q1)**.
- [3] Abishek Hazra, Tarachand Amgoth, Mainak Adhikari, and Satish Srirama Narayana *A Comprehensive Survey on Interoperability for Industrial IoT: Taxonomy, Standards and Future Directions*, **ACM Computing Surveys**, 2021. **IF: 10.282 (Q1)**.
- [4] Abishek and Tarachand Amgoth, Mainak Adhikari, Satish Srirama Narayana *Collaborative AI-enabled Intelligent Partial Service Provisioning in Green Industrial Fog Networks*, **IEEE IoT Journal: Accepted**, 2021. **IF: 9.462 (Q1)**.
- [5] Abishek and Tarachand Amgoth, Mainak Adhikari, Satish Srirama Narayana *Fog Computing for Next-Generation Internet of Things: Architecture, Challenges and Future Trends*, **Computer Science Review: Accepted**, 2021. **IF: 7.872 (Q1)**.
- [6] Abhishek Hazra, Mainak Adhikari, and Tarachand Amgoth, *DRL-enabled Mobile Edge Computing for Service Deployment in Next-Generation Industrial Networks*, **IEEE Transaction on Network Science and Engineering**, 2021. **IF: 4.195 (Q1)**.
- [7] Abhishek Hazra, Tarachand Amgoth, Mainak Adhikari, and Satish Narayana Srirama, *Stackelberg Game for Service Deployment in 6G-aware Fog Networks*, **IEEE Internet of Things Journal: Accepted**, 2020. **IF: 9.462 (Q1)**.
- [8] Abhishek Hazra, Tarachand Amgoth, Mainak Adhikari, and Satish Narayana Srirama, *Joint Computation Offloading and Scheduling Optimization in IoT-Assisted Fog Networks*, **IEEE Transactions on Network Science and Engineering: Accepted**, 2020. **IF: 4.195 (Q1)**.
- [9] Praveen and Tarachand Amgoth, *A Survey on Recent Advances in IoT Application Layer Protocols and Scope of Machine Learning for Research Directions*, **Digital Communication and Networks: Accepted**, 2021. **IF: 6.797 (Q1)**.
- [10] Praveen Kumar D., Tarachand Amgoth, and Satish Narayana Srirama, *Intelligent Congestion Control Algorithm for CoAP using Deep Reinforcement Learning*, **Journal of Ambient Intelligence & Humanized Computing (Springer): Accepted**, 2020. **IF: 7.104 (Q1)**.
- [11] Dinesh Kumar Sah and Tarachand Amgoth, *Energy Efficient Medium Access Control Protocol for Data Collection in Wireless Sensor Network: A Q-learning approach*, **Sustainable Energy Technologies and Assessments (Elsevier): Accepted**, 2022. **IF: 5.353 (Q1)**.

- [12] Madana Srinivas and Tarachand Amgoth, *Delay Tolerant Charging Scheduling By Multiple Mobile Chargers In Wireless Sensor Network Using Hybrid GSFO*, **Journal of Ambient Intelligence & Humanized Computing: Accepted**, 2021. **IF: 7.117 (Q1)**.
- [13] Ramesh Kumar and Tarachand Amgoth, *Reinforcement learning based connectivity restoration in wireless sensor networks*, **Applied Intelligence: Accepted**, 2021. **IF:5.086 (Q1)**.
- [14] Praveen Kumar D., Tarachand Amgoth, and A.C.S. Rao *Delay-aware Data Fusion in Duty-Cycled Wireless Sensor Networks: A Q-learning Approach*, **Sustainable computing: Accepted**, 2021. **IF: 4.028 (Q1)**.
- [15] Mainak Adhikari, Tarachand Amgoth, and Satish Narayana Srirama, *Application Offloading Strategy for Hierarchical Fog Environment through Swarm Optimization*, **IEEE Internet of Things Journal**, vol.7, pp.4317-4328, 2020. **IF: 9.462 (Q1)**.
- [16] Dipak Kumar Sah and Tarachand Amgoth, *Renewable Energy Harvesting Schemes in Wireless Sensor Networks: A Survey*, **Information Fusion (Elsevier): Accepted**, 2020. **IF: 12.975 (Q1)**.
- [17] Biswa Mohan Sahoo, Hari Mohan Pandey, and Tarachand Amgoth, *GAPSO-H: A Hybrid Approach Towards Optimizing the Cluster Based Routing in Wireless Sensor Network*, **Swarm and Evolutionary Computation (Elsevier): Accepted**, 2020. **IF: 7.117 (Q1)**.
- [18] Praveen Kumar D., Tarachand Amgoth, Chandra Sekhar Annavarapu, *An Extended ACO-based Mobile Sink Path Determination in Wireless Sensor Networks*, **Journal of Ambient Intelligence & Humanized Computing (Springer): Accepted**, 2020. **IF: 7.104 (Q1)**.
- [19] Sanjai Prasada Rao Banoth, Praveen Kumar D., and Tarachand Amgoth *Dynamic mobile charger scheduling with partial charging strategy for WSNs using deep-Q-networks*, **Neural Computing and Applications: Accepted**, 2021. **IF: 5.606 (Q1)**.
- [20] Biswa Mohan Sahoo, Tarachand Amgoth, and Hari Mohan Pandey, *Particle Swarm Optimization Based Energy Efficient Clustering and Sink Mobility in Heterogeneous Wireless Sensor Network*, **Ad Hoc Networks (Elsevier): Accepted**, 2020. **IF: 4.111 (Q1)**.
- [21] Mainak Adhikari, Tarachand Amgoth, and Satish Narayana Srirama, *Multi-Objective Scheduling Strategy for Scientific Workflows in Cloud Environment: A Firefly-based Approach*, **Applied Soft Computing (Elsevier): Accepted**, 2020. **IF: 6.725 (Q1)**.
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- [29] Madnesh K. Gupta and Tarachand Amgoth, *Power and resource-aware virtual machine placement for IaaS cloud*, **Sustainable Computing (Elsevier)**, vol.19, pp.50-62, 2018. **IF: 4.028 (Q1)**.
- [30] Sunil Kumar, Dheeraj Kumar, Praveen Kumar Donta and Tarachand Amgoth, *Land Subsidence Monitoring and Prediction using Modified PSInSAR and Recurrent Neural Networks*, **Stochastic Environmental Research and Risk Assessment: Accepted**, 2021. **IF: 3.379 (Q1)**.
- [31] Prasannababu and Tarachand Amgoth, *Adaptive SSO Based Node Selection For Partial Charging In Wireless Sensor Network*, **Peer-to-Peer Networks and Applications (SpringerNature)**, vol.10, pp.66-78, 2021. **IF: 3.307 (Q2)**.
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- [35] Madana Srinivas and Tarachand Amgoth, *Data Acquisition in large-scale Wireless Sensor Networks using Multiple Mobile Sinks: A Hierarchical Clustering Approach*, **Wireless Networks: Accepted**, 2021. **IF: 2.602 (Q2)**.
- [36] Sanjai Prasada Rao, Praveen Kumar D. and Tarachand Amgoth, *Target-aware distributed coverage and connectivity algorithm for wireless sensor networks*, **Wireless Networks: Accepted**, 2021. **IF: 2.602 (Q2)**.
- [37] Korra Cheena and Tarachand Amgoth, *Deep Q-probabilistic algorithm based rock hyraxes swarm optimization for channel allocation in CRSN smart grids*, **Wireless Networks: Accepted**, 2021. **IF: 2.602 (Q2)**.
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- [46] Mainak Adhikari, Tarachand Amgoth, and Satish Narayana Srirama, *A Comprehensive Survey on Nature-Inspired Algorithms and Their Applications in Edge Computing: Challenges and Future Directions*, **Software: Practice and Experience**, 2021.
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- [2] Dipak K. Sah and Tarachand Amgoth, *Target coverage area in energy harvesting wireless sensor networks*, **ICPCCT 2022**, 2022.
- [3] Ramesh Kumar and Tarachand Amgoth, *Deployment of sensor nodes for connectivity restoration and coverage maximization in WSNs*, **WiSPNET2021**, 2021.
- [4] Madana Srinivas, Praveen Kumar Donta and Tarachand Amgoth, *Efficient Algorithms for Point and Area Sweep–Coverage in Wireless Sensor Networks*, **WiSPNET2021**, 2021.
- [5] Madana Srinivas, Praveen Kumar Donta and Tarachand Amgoth, *Finding the Minimum Number of Mobile Sinks for Data Collection in Wireless Sensor Networks*, **COMNETSAT**, 2020.
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- [7] Praveen Kumar D., Tarachand Amgoth, Chandra Sekhar Annavarapu, *Scheduled Virtual Machine Placement in IaaS Cloud: A MPSO Approach*, **IEMTRONICS**, 2020, **Vancouver, Canada**.
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- [10] Divya Singh and Tarachand Amgoth, *Joint Wireless Charging and Data Collection using Mobile Element for Rechargeable WSNs*, **GUCON**, 2019.
- [11] Shubham Vaishnav and Tarachand Amgoth, *Mobile Charger Scheduling using Partial Charging Strategy for Rechargeable WSNs*, **GUCON**, 2019.
- [12] Mainak Adhikari and Tarachand Amgoth, *Multi-Objective Accelerated Particle Swarm Optimization Technique for Scientific workflows in IaaS cloud*, **ISII**, 2018.
- [13] Madnesh K. Gupta and Tarachand Amgoth, *On-demand Virtual Machine Placement in Infrastructure Cloud*, **ICACCI**, 2018.
- [14] Madnesh K. Gupta and Tarachand Amgoth, *QoS-aware Virtual Machine Placement for Infrastructure Cloud*, **GUCON**, 2018.
- [15] Mainak Adhikari and Tarachand Amgoth, *An Enhanced Dynamic Load Balancing mechanism for task deployment in IaaS cloud*, **GUCON**, 2018.
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- [18] Mainak Adhikari and Tarachand Amgoth, *Efficient algorithm for workflow scheduling in cloud computing environment*, **IC3**, 2016.
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- [20] Tarachand Amgoth and Prasanta K. Jana, *EDCP: Efficient distributed clustering protocol for large-scale wireless sensor networks*, **ICECCS**, 2013. **(Second Best paper Award)**
- [21] Tarachand Amgoth and Prasanta K. Jana, *BDCP: A backoff-based distributed clustering protocol for wireless sensor networks*, **ICACCI**, 2013.
- [22] Tarachand Amgoth, V Kumar, A Raj, A Kumar, and Prasanta K. Jana, *An energy efficient load balancing algorithm for cluster-based wireless sensor networks*, **INDICON**, 2012.