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Research Publications:

Journal Articles

1. **Saugata Roy**, Nabajyoti Mazumdar, Rajendra Pamula. "An energy optimized and QoS concerned data gathering protocol for wireless sensor network using variable dimensional PSO". *Ad Hoc Networks (Elsevier)*. (2021) [ISSN: 1570-8705]
<https://doi.org/10.1016/j.adhoc.2021.102669>
2. Nabajyoti Mazumdar, **Saugata Roy**, Amitava Nag, Sukumar Nandi. "An adaptive hierarchical data dissemination mechanism for mobile data collector enabled dynamic wireless sensor network". *Journal of Network and Computer Applications (Elsevier)*. (2021) [ISSN: 1084-8045]
<https://doi.org/10.1016/j.jnca.2021.103097>
3. Nabajyoti Mazumdar, **Saugata Roy**, Amitava Nag, Jyoti Prakash Singh. "A buffer-aware dynamic UAV trajectory design for data collection in resource-constrained IoT frameworks". *Computers and Electrical Engineering (Elsevier)*. (2022) [ISSN: 1879-0755]
<https://doi.org/10.1016/j.compeleceng.2022.107934>
4. **Saugata Roy**, N Mazumdar, R Pamula. "An energy and coverage sensitive approach to hierarchical data collection for mobile sink based wireless sensor networks". *Journal of Ambient Intelligence and Humanized Computing (Springer)*. (2020) [ISSN: 1868-5145]
<https://doi.org/10.1007/s12652-020-02176-8>
5. **Saugata Roy**, N Mazumdar, R Pamula. "An optimal mobile sink sojourn location discovery approach for the energy-constrained and delay-sensitive wireless sensor network". *Journal of Ambient Intelligence and Humanized Computing (Springer)*. (2021) [ISSN: 1868-5145]
<https://doi.org/10.1007/s12652-020-02886-z>

Conference Proceedings (Scopus Indexed)

1. **Saugata Roy**, N Mazumdar, R Pamula. "Efficient Pest Bird-Controlling Algorithm in Unmanned Agriculture System". *Evolving Technologies for Computing, Communication and Smart World*. Springer, Singapore. (2021) [ISBN: 978-981-15-7803-8]
https://doi.org/10.1007/978-981-15-7804-5_37
2. Mazumdar, Nabajyoti, **Saugata Roy**, and Soumen Nayak. "A survey on clustering approaches for wireless sensor networks". *2018 2nd International Conference on Data Science and Business Analytics (ICDSBA)*, IEEE. (2018)
<https://doi.org/10.1109/ICDSBA.2018.00049>
3. Mazumdar, Nabajyoti, et al. "An Efficient Communication Protocol for Energy-Constraint IoT Devices for Environment Monitoring Applications" *Evolving Technologies for Computing, Communication and Smart World*. Springer, Singapore. (2021) [ISBN: 978-981-15-7803-8]
https://doi.org/10.1007/978-981-15-7804-5_36