Dr. N. SIVAKUMARAN

Professor, ICE

National Institute of Technology, Tiruchirapalli

Journal Publications:

1. R Kondareddy, **N Sivakumaran**, K Radhakrishnan, PK Nayak, "Performance analysis of solar tunnel dryer with thermal storage and Photovoltaic system for drying star fruit" , E&ES 463 (1), 012138, 2020.

2. S Sankaranarayanan, **N Sivakumaran**, TK Radhakrishnan, ..." Dynamic soft sensor based parameters and demand curve estimation for Water Distribution System: Theoretical and Experimental cross validation", Control Engineering Practice 102, 104544, 2020.

3. L Maheswari, **N Sivakumaran**, KR Balasubramanian, G Saravana Ilango, "A unique control strategy to improve the life cycle of the battery and to reduce the thermal runaway for electric vehicle applications", Journal of Thermal Analysis and Calorimetry, 1-13,2020.

4. L Maheswari, **N Sivakumaran**, "An isolated single-switch high step-up DC/DC converter with three-winding transformer for solar photovoltaic applications", Electrical Engineering, 1-10, 2020.

5. C Sudalaimani, **N Sivakumaran**, TT Elizabeth, VS Rominus, "Automated detection of the preseizure state in EEG signal using neural networks", biocybernetics and biomedical engineering 39 (1), 160-175, 2019.

6. H Karnan, **N Sivakumaran**, R Manivel, "An Efficient Cardiac Arrhythmia Onset Detection Technique Using a Novel Feature Rank Score Algorithm", Journal of medical systems 43 (6), 167, 2019.

7. M Saravanabalaji, **N Sivakumaran**, S Sankarnaraynan, "Dynamic Compensation of Acoustic Resonance for Water Flow System", Journal of The Institution of Engineers (India): Series B 100 (5), 405-415, 2019.

8. S Sankaranarayanan, **N Sivakumaran**, TK Radhakrishnan ..." Water hammer vibrations in pressurized water distribution system: Conceptual development of dynamic model and validation", Asia-Pacific Journal of Chemical Engineering 14 (5), e2345, 2019.

9. S Sankaranarayanan, G Swaminathan, TK Radhakrishnan, **N Sivakumaran** ..." Missing data estimation and IoT based flyby monitoring of a water distribution system: Conceptual and experimental validation", International Journal of Communication Systems, e4135, 2019.

10. S Revathi, **N Sivakumaran**, D Ramajayam, MS Saraswathi, S Backiyarani, ..." Growth estimation during hardening phase of tissue cultured banana plantlets using bootstrapped artificial neural network", Journal of Environmental Biology 40 (4), 719-724, 2019.

11. **N Sivakumaran**, G Swaminathan, S Sankaranarayanan, ..." Unforeseen data estimation in water distribution system", CSI Transactions on ICT 7 (2), 153-159, 2019.

12. G Ganapathy, **N Sivakumaran**, M Punniyamoorthy, R Surendheran, ..." Comparative study of machine learning techniques for breast cancer identification/diagnosis", International Journal of Enterprise Network Management 10 (1), 44-63, 2019.

13. S Sankaranarayanan, **N Sivakumaran**, TK Radhakrishnan, ... "Metaheuristic-based approach for state and process parameter prediction using hybrid grey wolf optimization", AsiaPacific Journal of Chemical Engineering 13 (4), e2215, 2018

14. AR Metkar, SR Valsalam, **N Sivakumaran**, "A Novel Control Scheme Design and Implementation of Cane feeding System in Sugar Plant", IFAC-PapersOnLine 51 (1), 389-394, 2018

15. E.Sathish, **N.Sivakumaran**, Sishaj P Simon, S.Raghavan, Genetic algorithm based feature selection for classification of focal and non-focal intracranial Electroencephalograhic signals, Journal of scientific and industrial research, Vol. 76, 2017, pp614-619.

16. C Sahu, V Kirubakaran, TK Radhakrishnan, **N Sivakumaran**, "Explicit model predictive control of split-type air conditioning system", Transactions of the Institute of Measurement and Control 39 (5), 754-762, 2017

17. K Rajkumar, S Narayanan, **N Sivakumaran**, "Design of centralized controller based on inverted decoupling structure for non-square systems with time delay", 2017 Trends in Industrial Measurement and Automation (TIMA), 1-5

18. L Maheswari, PS Rao, **N Sivakumaran**, GS Ilango, C Nagamani, "A control strategy to enhance the life time of the battery in a stand-alone PV system with DC loads", IET Power Electronics 10 (9), 1087-1094.

19. S Revathi, TK Radhakrishnan, **N Sivakumaran**, "Climate control in greenhouse using intelligent control algorithms", 2017 American Control Conference (ACC), 887-892.

20. E.Sathish, **N.Sivakumaran**, S.Sankaranarayanan, Grey wolf optimization based parameter selection for support vector machines, International Journal for Computation and Mathematics in Electrical and Electronic Engineering (SCI-Expanded Indexed) - Vol. 35, no. 5, pp.1513-1523, 2016.

21. E.Sathish, **N.Sivakumaran**, K.Radhakrishnan, S.Raghavan, T.K.Radhakrishnan, Importance of classification algorithms in epileptic seizure detection, Journal of bioengineering & biomedical (Pubmed Indexed) – vol. 6, no. 3, pp. 1-2, 2016.

22. S.Revathi, **N.Sivakumaran,** "Fuzzy Based Temperature Control of Greenhouse, IFAC-PapersOnLine, Volume 49, Issue 1, 2016, Pages 549-554, https://doi.org/10.1016/j.ifacol.2016.03.112.

23. V Kirubakaran, TK Radhakrishnan, **N Sivakumaran**," Fuzzy aggregation based multiple models explicit multi parametric MPC design for a quadruple tank process", IFAC-PapersOnLine 49 (1), 555-560, 2016

24. V Kirubakaran, C Sahu, TK Radhakrishnan, **N Sivakumaran**," Energy efficient model based algorithm for control of building HVAC systems", Ecotoxicology and environmental safety 121, 236-243, 2015.

25. C Ahilan, JER Dhas, K Somasundaram, **N Sivakumaran**, "Performance assessment of heat exchanger using intelligent decision making tools", Applied Soft Computing 26, 474-482, 2015.

26. **N Sivakumaran**, E Sathish, K Radhakrishnan, S Raghavan,... "Journal of Bioengineering & Biomedical Science, Sci 6 (3), 1-2, 2016, DOI: 10.4172/2155-9538.1000193

27. Chinmay Sahu,V.Kirubhakaran, T.K.Radhakrishnan, **N.Sivakumaran**, "Explicit Model Predictive Control of Split-type Air Conditioning System", Transactions of the Institute of Measurement and Control, 32 (3), pp.1-9,2015. (IF 0.736)

28. Chinmay Sahu,V.Kirubhakaran, T.K.Radhakrishnan, **N.Sivakumaran**, "Closed loop building data based estimation and Energy Efficient Model Predictive Control of Heating Ventilation and Air Conditioning System", Ecotoxicology and Environmental Safety,121 236-243,2015.