Dr.N.SIVAKUMARAN

ASSOCIATE PROFESSOR, INSTRUMENTATION AND CONTROL ENGINEERING NIT TRICHY

PUBLICATIONS:

- 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.
- 2. 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.
- 3. 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
- 4. 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)
- 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.
- 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.
- 7. 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.
- 8. 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.

- 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
- 10. 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.
- 11. 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
- 12. 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
- 13. 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.
- 14. S Revathi, TK Radhakrishnan, **N Sivakumaran**, "Climate control in greenhouse using intelligent control algorithms", 2017 American Control Conference (ACC), 887-892.
- 15. 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
- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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.

- 20. 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.
- 21. 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.
- 22. 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.
- 23. **N Sivakumaran**, G Swaminathan, S Sankaranarayanan, ..." Unforeseen data estimation in water distribution system", CSI Transactions on ICT 7 (2), 153-159, 2019.
- 24. 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.
- 25. 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.
- 26. 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.
- 27. 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.
- 28. 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.