

## **Dr. B. Subathra**

### **Publication list**

1. Muthukumar. N; Srinivasan, Seshadhri; Subathra. B; Ramkumar. K, Teaching Industrial Internet-of-Things-Based Model-Predictive Controller, IEEE Transactions on Education 2020, IEEE
2. Sairam, S; Srinivasan, Seshadhri; Marafioti, G; Subathra, B; Mathisen, G; Bekiroglu, Korkut; Explainable Incipient Fault Detection Systems for Photovoltaic Panels, arXiv preprint arXiv:2011.09843, 2020.
3. Vadamalraj, N., Zingre, K., Seshadhri, S., Arjunan, P., & Srinivasan, S; Hybrid Ventilation System and Soft-Sensors for Maintaining Indoor Air Quality and Thermal Comfort in Buildings Atmosphere, 11-1, 110, 2020, MDPI
4. Visalini, K; Subathra, B; Srinivasan, Seshadhri; Palmieri, Giovanni; Bekiroglu, Korkut; Thiyaku, S; Sensor Placement Algorithm With Range Constraints for Precision Agriculture, IEEE Aerospace and Electronic Systems Magazine, 34- 6,15-Apr 2019, IEEE.
5. Kumar, M Satheesh; Srinivasan, Seshadhri; Subathra, B; A Deterministic Demand Response program for Schedulable loads in Power Distribution system, International Journal of Pure and Applied Mathematics, 118-18, 2071-2077, 2018
6. Muthukumar, N; Ramkumar, K; Srinivasan, Seshadhri; Saravanakumar, G; Subathra, B;
7. Path-planning in autonomous electric vehicle using nonlinear state estimation and behaviour-based controllers, International Journal of Vehicle Systems Modelling and Testing, 12, 4-Mar 304-315, 2017, Inderscience Publishers (IEL)
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9. Balasubramanian, S., Srinivasan, S., Buonopane, F., Subathra, B., Vain, J., & Ramaswamy, S. (2016). Design and verification of Cyber-Physical Systems using True Time, evolutionary optimization and UPPAAL, Microprocessors and Microsystems, 42, 37-48. (IF 0.830) listed in most downloaded paper of the journal.
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11. B. Sreram, Seshadhri Srinivasan, H. Kebraei, Subathra, B., V.E. Balas, and L. Glielmo, Stochastic Optimal Controller Design for Medium Access Constrained Networked Control Systems with Unknown Dynamics", Intelligent Decision Technologies, vol. 11, no.2, pp.223-233, 2017.
12. Giridharan Karunakaran, Seshadhri Srinivasan, Subathra, B., and V.E. Balas, A new analytical tuning rule for the GPC: A shell-and-Tube heat exchanger case study", Accepted for publication in Information Technology and Control, 2017.
13. S. Mallikarjun, V. Kaparin, S. Seshadhri, Subathra, B., and V.E. Balas, Predictive Smart Thermostat Controller for Heating, Ventilation and Air-Conditioning Systems", Accepted for Publication in Proceedings of the Estonian Academy of Sciences, 2017.
14. Ganesha Perumal, D., Saravanakumar, G., Seshadhri, S., Subathra, B., and A. Ramakalyan MILP

based autonomous path-planning controller for unknown environments with dynamic obstacles, International Journal of Heavy Vehicle Design, Vol. 23, no.4, 2016 pp. 352-369.

15. B. Sreram, F. Bounapane, Subathra, B., S. Srinivasan, Muthukumar N, Estimating Random Delays in Modbus over TCP/IP network Using Experiments and General Linear Regression Neural Networks with Genetic Algorithm Smoothing, Advances in Intelligent Systems and Computing, vol.2, no. 398, 2016.
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19. M. Satheeshkumar, Seshadhri Srinivasan, and B. Subathra, "Fog Computing for Integrating User Preferences from Building in Smart Demand Response Programs", Accepted for Publication in Smart Cities: Development and Governance Frameworks: Smart electricity/energy scenarios in digital Cities, Springer Book.
20. Subathra, B., and T. K. Radhakrishnan. "Modeling and Predictive Control Using Hybrid Intelligent Techniques for a Nonlinear Multivariable Process." Instrumentation Science and Technology 39, no. 2 (2011): 211-230.
21. S. Mallikarjun, A.R. Gautam, K. Muniyasamy, M. Maharaja, B. Subathra, Seshadhri Srinivasan, LASSO Based Building Thermal Model for Heating, Ventilation and Air conditioning Control, 2015 IEEE International Conference on Electrical, Computer and Communication Technologies
22. Seshadhri Srinivasan, Furio Buonopane, G. Saravana Kumar, B. Subathra, Srinivaswamy, Modelling Time-Varying Delays in Networked Automation Systems with Heterogeneous Networks Using Machine Learning Techniques, In proceedings of the conference on automation science and engineering 2015 (CASE 2015), pp. 362-368, Gothenberg, Sweden.
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25. D. Ganeshperumal, G. Saravankumar, S. Srinivasan, B. Subathra, and S. Ramaswamy, Nonlinear State Estimation Based Predictive Path Planning Algorithm Using Infrastructure-to-Vehicle (I2V) Communication for Intelligent Vehicle Proceedings of the Second International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA 2014), Elsevier.
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28. M. Satheesh Kumar, B. Subathra, and Seshadhri Srinivasan, Ensemble Wavelet Learners for Demand Forecasting in Smart Grids", Accepted for publication in INCOS 2017.