

Dr. R. Saravanakumar

Professor
Department of Control and Automation
Vellore Institute of Technology- Vellore,
Vellore -632 014,
Tamilnadu.
Phone : +91-9944507148
E-mail : rsaravanakumar@vit.ac.in



Publications List of Dr. R. Saravanakumar

International Publication:

1. Jain, Anjana, and **Rajendran Saravanakumar**. "Intelligent Proportional Integral Terminal Sliding Mode Control for variable speed standalone wind energy conversion system." *Environmental Progress & Sustainable Energy* (2020): e13520.
2. Jain, Anjana, **R. Saravanakumar**, and S. Shankar. "Moving Average Filter-PLL-Based Voltage and Frequency Control of Standalone WECS." *IETE Journal of Research* (2020): 1-10.
3. Jain, Anjana, and **Rajendran Saravanakumar**. "Comparative analysis of fractional order PI and integer order PI based controller for hybrid standalone wind energy conversion system." *Environmental Progress & Sustainable Energy* 39, no. 2 (2020): e13293.
4. Jain, Anjana, and **R. Saravanakumar**. "Performance Analysis of Fractional-Order PI-Based Controller for Variable Speed Hybrid Standalone WECS." In *Renewable Energy and Climate Change*, pp. 23-37. Springer, Singapore, 2020.
5. Jain, Anjana, and **R. Saravanakumar**. "Double integral sliding surface based intelligent proportional integral control for standalone wind energy conversion system." (2019): 428-8.
6. Jain, Anjana, **R. Saravanakumar**, S. Shankar, and V. Vanitha. "Adaptive SRF-PLL based voltage and frequency control of hybrid standalone WECS with PMSG-BESS." *International Journal of Emerging Electric Power Systems* 19, no. 6 (2018).
7. Matthew, K., and **R. Saravanakumar**. "Design of double integral sliding mode control for variable speed wind turbine at partial load region." In *2017 IEEE International Conference on Computational Intelligence and Computing Research (ICCIC)*, pp. 1-5. IEEE, 2017.
8. Manimozhi, M., and **R. Saravanakumar**. "Sensor and actuator bias estimation using multi model approach." *Computers & Electrical Engineering* 57 (2017): 118-133.

9. Elangovan, D., M. Sai Krishna Reddy, H. M. Tania, and **R. Saravana Kumar**. "Design, Simulation and Implementation of Current Fed Isolated Full Bridge DC-DC with Voltage Multiplier for Fuel Cell Grid Applications." *Energy Procedia* 90 (2016): 574-586.
10. **Saravanakumar, R.**, and Debashisha Jena. "Nonlinear control of wind turbine with optimal power capture and load mitigation." *Energy Systems* 7, no. 3 (2016): 429-448.
11. Thiagarajan, K., and **R. Saravana Kumar**. "Real time energy management and load forecasting in smart grid using compactrio." *Procedia Computer Science* 85 (2016): 656-661.
12. Dubey, Akshay Prasad, Santosh Mohan Pattnaik, Arunava Banerjee, Rajasree Sarkar, and **Saravana Kumar**. "Autonomous control and implementation of coconut tree climbing and harvesting robot." *Procedia computer science* 85 (2016): 755-766.

International Conference:

13. **Saravanakumar, R.**, and Anjana Jain. "Design of Complementary Sliding Mode Control for Variable Speed Wind Turbine." In *2018 8th International Conference on Power and Energy Systems (ICPES)*, pp. 171-175. IEEE, 2018.
14. Jain, Anjana, and **R. Saravanakumar**. "Comparative Analysis of DSOGI-PLL& Adaptive Frequency Loop-PLL for Voltage and Frequency control of PMSG-BESS based Hybrid Standalone WECS." In *2018 8th International Conference on Power and Energy Systems (ICPES)*, pp. 234-239. IEEE, 2018.
15. Kumar, Kanike Vinod, and **R. Saravana Kumar**. "Analysis of Logic Gates for Generation of Switching Sequence in Symmetric and Asymmetric Reduced Switch Multilevel Inverter." *IEEE Access* 7 (2019): 97719-97731.
16. Dubey, Akshay P., Santosh Mohan Pattnaik, and **R. Saravanakumar**. "Control and Operation of 4 DOF Industrial Pick and Place Robot Using HMI." In *Proceedings of the International Conference on Soft Computing Systems*, pp. 787-798. Springer, New Delhi, 2016.
17. Chandrashekar, Bongu, Anirudh Kasavaraju, and **R. Saravanakumar**. "Optimal Vector Control Of Kite Tethers For Maximum Power Extraction From High Altitude Winds & Kite Designing." In *MATEC Web of Conferences*, vol. 225, p. 03011. EDP Sciences, 2018.