

Dr.R.Shivakumar
Professor,
Sona College of Technology,
Salem-636 005.

Publications- Journals

1. **R.Shivakumar**, D.Hepsiba, L.D.Vijayanand, C.Pavithra, K.S.Yamuna and K.Vinothkumar, “Performance analysis of QZSI for PV integrated grid system”, International Journal of Advanced Trends in Computer Science and Engineering, Vol.9, No.5, pp.7731-7735, 2020. (**SCOPUS** indexed)
2. **R.Shivakumar**, S.Sowranchana, M.Sugumaran, “Stability improvement in multimachine power systems using nature inspired algorithms”, Test Engineering and Management, Vol.83, pp.10659-10668, 2020. (**SCOPUS** indexed)
3. P.Rajakumar, M.Senthilkumar and **R.Shivakumar**, “Optimal Location and Sizing of Renewable Energy Based Distributed Generation Units in a Radial Distribution Power Network using Ant Lion Optimization Algorithm, Journal of Electrical Engineering, Vol.20, No.1, pp.154-165, 2020.
4. **R.Shivakumar**, S.Sowranchana, M.Sugumaran, “Stability improvement in multimachine power systems using nature inspired algorithms”, International Journal of Advanced Science and Technology, Vol.29, No.10s, pp.6407-6418, 2020.
5. R.Banupriya, **R.Shivakumar** and K.Krishnamoorthi, “Design and Implementation of Crow search algorithm tuned MPPT controller for Grid connected PV system, Journal of Electrical Engineering, Vol.18, Edition 1, pp.391-398, 2018. <http://jee.ro/articles/WB1503041481W599697c9745fb.pdf>
6. K.S.Yamuna, **R.Shivakumar**, “Performance analysis of Artificial Intelligent techniques based Rotor position estimation of SRM drive, Journal of Electrical Engineering, Vol.18, Edition 2, pp.366-374, 2018. <http://jee.ro/articles/WZ1509107548W59f3275cc7d25.pdf>
7. C.Santhakumar, **R.Shivakumar** and C.Bharatraja, “A Pulse width modulation for PV connected Diode assisted Z source NPC- MLI to obtain High voltage Gain”, Journal of Electrical Engineering, Vol. 17, Edition 4, pp. 290-297, 2017. <http://jee.ro/articles/WV1484300103W58789f47cbc90.pdf>
8. K.S.Yamuna, **R. Shivakumar**, “Green Powered Intelligent Controller Driven Switched Reluctance Motor For Rural Irrigation System” International Journal for Ecology, Environment and Conservation, Volume 23, September suppl. issue, pp-271-275, 2017. (**SCOPUS**)
9. S. Sasikumar, K. Krishnamoorthi, **R. Shivakumar**, “Design of bidirectional converter for battery operated applications using renewable energy systems” International Journal for Ecology, Environment and Conservation, Volume 23, September suppl. issue, pp-204- 209, 2017. (**SCOPUS**)
10. G.Suresh, **R. Shivakumar**, K. Krishnamoorthi, “Stability Analysis Of Hybrid Thermal And Wind Energy System Using Modified Water Cycle Tuned Dual Input Controller” International Journal for Ecology, Environment and Conservation, , Volume 23, September suppl. issue, pp-276-281, 2017. (**SCOPUS**)
11. V.M.Periasamy, **R.Shivakumar** and P.Selvakumar, “Modelling and simulation of solar and wind energy input DC-DC converter based BLDC motor drive for water pumping system”, International Journal of Advanced Research Trends in Engineering and Technology, Vol.4, No.9, pp. 41-46, 2017.
12. R.Sankarganesh, **R.Shivakumar** and S.Chandrasekar, “Study on Nano-Modified Mineral Oil Surface Discharge Partial Discharge Signal Characteristics for High Voltage Transformer Applications”, International Journal of Computational and Theoretical Nanoscience, Vol.14, Issue 4, pp. 1770-1777, April 2017. ISSN : 1546-1955.

13. P.Raja and **Dr.R.Shivakumar (2017)**, “Dual input power system stabilizer for multi machine infinite bus system using neuro fuzzy system”, International Journal of Engineering Research and Technology, Vol.6, Issue 4, pp. 583-587, April 2017.
14. R.Satheeshkumar and **R.Shivakumar (2016)**, “Ant lion approach for load frequency control of multi area interconnected power systems”, Circuits and Systems Journal, Vol. 7, No.9, pp. 2357-2383, July 2016.
15. R.Sankarganesh, **R.Shivakumar** and S.Chandrasekar (2016) “Analysis of partial discharge signal characteristics of Nano-mineral oil for transformer conditioning monitoring applications, ” Asian Journal of Research in Social sciences and Humanities, Volume 6, No.7, pp 341-357, July 2016.
16. K.Kannan, **R.Shivakumar** and S.Chandrasekar (2016) “A Random Forest Model Based Pollution Severity Classification Scheme of High Voltage Transmission Line Insulators” Journal of Electrical Engineering & Technology, Volume 11 Number 4, pp 951-960, July 2016. (SCI indexed)
17. **R.Shivakumar** and P.Gopinath (2016), “A Review of Various Feature Extraction Methods On Finger Vein Images”, International Journal of Advanced Research trends in Engineering and Technology , Vol.3, Issue 2, pp.1060-1063, March 2016.
18. **R.Shivakumar** and M.Rangarajan (2016), “Small signal stability analysis of power system network using water cycle optimizer”, International Journal of Emerging Technology in Computer science and Electronics, Vol.20, Issue 2, pp.297-302, Feb 2016.
19. **R.Shivakumar** and S.Laksana (2015), ‘Small signal stability enhancement using BAT algorithm tuned controller in typical power network’, International Journal of Applied Engineering research- Special Issue, Vol. 10, No.9, pp. 7323-7328, 2015.
20. **R.Shivakumar** and M.Kalanidhi (2015), ‘An enhancement in power transfer limits using PV-STATCOM in hybrid transmission system ’, International Journal of Applied Engineering research- Special Issue, Vol. 10, No.9, pp. 7373-7376.

International/ National Conference:

1. **Dr.R.Shivakumar** and M.Kalanidhi "An Enhancement in power transfer limits using PV-STATCOM for Hybrid Transmission System", Proceedings of International conference on "Innovative strategies in Renewable Energies and its applications ISREA'15 ISBN:978-93-83910-05-02, Sona College of Technology, Salem, 5-6 March 2015.
2. .R.Satheesh kumar and **Dr.R.Shivakumar** "LOAD FREQUENCY CONTROL OF TWO AREA INTERCONNECTED SYSTEMS", Proceedings of International conference on "Innovative strategies in Renewable Energies and its applications ISREA'15 ISBN:978-93-83910-05-02, Sona College of Technology, Salem, 5-6 March 2015.
3. **Dr.R.Shivakumar** & S.Laksana, "Small signal stability enhancement using BAT algorithm tuned controller in typical power system network", Proceedings of International conference on "Engineering Technology and Science ICETS'15, Muthayammal College of Engineering, Rasipuram, 5-6 March 2015.
4. **Dr.R.Shivakumar** and C.Santhakumar, “Design and Implementation of Multilevel Inverter for Photovoltaic system Using FPGA Controller”, National conference on Recent trends in Power Engineering for research scholars, IIT Madras, 29-30, Dec 2015.
5. **Dr.R.Shivakumar** and C.Suresh, “Design and Implementation of Multi input controller for enhancing power system dynamic stability”, National conference on Recent trends in Power Engineering for research scholars, IIT Madras, 29-30, Dec 2015.

6. **R.Shivakumar** and M.Rangarajan, “ Small signal stability analysis of power system network using water cycle optimizer”, Proceedings of International Conference on Advances in Electrical, Electronics and Computational Intelligence (ICAEECT16), KSR College of Engineering,Tiruchengode, 22.2.2016.
7. **R.Shivakumar** and M.Rangarajan, “ Multimachine stability analysis of power system using water cycle tuned dual input controller”, Proceedings of International Conference on Engineering Technology and Science (ICETS16), Muthayammal Engineering Institutions, Rasipuram, Namakkal, 18.3.2016..
8. **R.Shivakumar** and P.Gopinath, “A Review of Various Feature Extraction Methods On Finger Vein Images”, Proceedings of International Conference on “Research advances in Communication, Computation, Electrical Science and Structures” (RACCESS’16), Bharathiyar Institute of Engineering for Women,Deviyakurichi,12.3.2016.
9. M.Lavanya and **Dr.R.Shivakumar**, “Literature Survey on Microgrid Stability Analysis Techniques”, Proceedings of National conference on Innovative strategies in Green and soft computing for Renewable energies, Sona College of Technology, Salem, 31.3.2017.
10. G.Suresh and **Dr.R.Shivakumar**, “Stability Analysis of Hybrid Thermal and Wind Energy System Using Modified Water Cycle Tuned Dual Input Controller”, Proceedings of National conference on Innovative strategies in Green and soft computing for Renewable energies, Sona College of Technology, Salem, 31.3.2017.
11. P.Raja and **Dr.R.Shivakumar**, “Intelligent Neuro Fuzzy based dual input power system stabilizer for multimachine power system”, Proceedings of International conference on innovations in electrical , information and communication engineering, Kongunadu college of Engineering and Technology, Trichy, 24.3.2017.
12. P.Raja and **Dr.R.Shivakumar**, “Dual input power system stabilizer for multi machine infinite bus system using Neuro Fuzzy system”, Proceedings of National conference on Innovative strategies in Green and soft computing for Renewable energies, Sona College of Technology, Salem, 31.3.2017.
13. K.S.Yamuna and **Dr.R.Shivakumar**,” Green powered intelligent controller driven switched reluctance motor for rural irrigation system”, Proceedings of National conference on Innovative strategies in Green and soft computing for Renewable Energies, Sona College of Technology, Salem, 31.3.2017.
14. G.Suresh and **Dr.R.Shivakumar**, “Multiinput controller for stability analysis using ABC algorithm”, Proceedings of International conference on Engineering , Technology and Science, Muthayammal Engineering College, Rasipuram, 30.3.2017.
15. P.Raja and **Dr.R.Shivakumar**, “UPFC based Neuro Fuzzy system using dual input PSS for muti area power system”, Proceedings of International Conference on Adaptive Technologies for sustainable growth. Paavai Engineering College, Rasipuram, 18.2.2017.
16. **R.Shivakumar** and N.Yellamuni, “ Multimachine power system stability analysis using crow search algorithm”, Proceedings of International conference on Innovations in Science , Engineering, Technology and Management, Annapoorna Engineering College, Salem, 09.03.2018.
17. **R.Shivakumar** and N.Yellamuni, “Small signal stability analysis of power system using crow search tuned controller design”, Proceedings of International conference on Electrical Energy systems, SSN College of Engineering, Chennai, 07.03.2018.
18. **R.Shivakumar** and P.Gopinath, “Analysis of diverse transforms for finger vein recognition”, Proceedings of International conference on Applied science, Engineering and Technology, Sengunthar college of Engineering, Tiruchengode, 16.3.2018.

19. S.Muthamil selvan , **R.Shivakumar**, “ Design of PSS using optimization techniques for enhancing power system stability”, Proceedings of International Conference on Engineering and Technology, Rathinam Technical Campus, Coimbatore, 30.8.2018.
20. M.Lavanya and **R.Shivakumar**, “Power Quality improvement of hybrid renewable energy based islanded micro-grid using ANFIS controller based STATCOM“, Proceedings of 13th International Conference on Intelligent Systems and Control, Karpagam College of Engineering, Coimbatore, 10.01.2019.
21. S.Muthamil selvan , **R.Shivakumar**, “ Design of PSS using optimization techniques for enhancing power system stability”, Proceedings of National Conference on Recent Trends in Electrical Systems- RTES19, Sona College of Technology, Salem on 01.03.2019.
22. G.Suresh, **R.Shivakumar**, “ Dual input controller for stability analysis of multi machine system using metaheuristic method”, Proceedings of National Conference on Recent Trends in Electrical Systems- RTES19, Sona College of Technology, Salem on 01.03.2019.
23. K.S.Yamuna, **R.Shivakumar**, “Investigation of Rotor position estimation of SRM drive using AI techniques”, Proceedings of National Conference on Recent Trends in Electrical Systems- RTES19, Sona College of Technology, Salem on 01.03.2019.
24. V.M.Periasamy, **R.Shivakumar**, A.Jagadeeshwaran, S.Vijayshankar and Selvakumar “Miniature reaction wheel BLDC motor and drive system for attitude control”, Proceedings of National Conference on Recent Trends in Electrical Systems- RTES19, Sona College of Technology, Salem on 01.03.2019.
25. R.Banupriya, **R.Shivakumar**, “ Power electronic system using the renewable energy source- A survey”, Proceedings of National Conference on Recent Trends in Electrical Systems- RTES19, Sona College of Technology, Salem on 01.03.2019.
26. R.Sankarganesh, **R.Shivakumar**, “Characteristics of electric spring for renewable energy powered micro grids”, Proceedings of National Conference on Recent Trends in Electrical Systems- RTES19, Sona College of Technology, Salem on 01.03.2019.
27. K.S.Yamuna, **R.Shivakumar**, “Sensorless Rotor position estimation of SRM using AI techniques”, Proceedings of National Conference on Innovation in Electrical power and Energy systems, M.Kumarasamy College of Engineering, Karur, on 08.03.2019.
28. **R.Shivakumar**, S.Sowranchana, S.Madubalan, “Stability Improvement in Multimachine Power Systems using Nature Inspired Algorithms”, Proceedings of International Conference on Power Engineering (POWERCOIN’20), Sona College of Technology, Salem during March 12-13,2020.
29. K.S.Yamuna, **R.Shivakumar**, A.Rajendran, B.Sangeetha,“ Performance Evaluation of Multilevel Shunt Active Power Filter Using Fuzzy PI Control for Aircraft Power Utility”, Proceedings of International Conference on Power Engineering (POWERCOIN’20), Sona College of Technology, Salem during March 12-13,2020.
30. V.M.Periyasamy, **R.Shivakumar**, A.Jagadeeshwaran, S.Vijayshankar,“ Modelling and Simulation of Hybrid BLDC Wind Generator and Solar Powered Boost Converter Based BLDC Motor Drive for Irrigation System”, Proceedings of International Conference on Power Engineering (POWERCOIN’20), Sona College of Technology, Salem during March 12-13,2020.
31. J.Harirajkumar, **R.Shivakumar**, R.Versni,“ Smart Farming using Tiva Launch Pad With Security Alert System”, Proceedings of International Conference on Power Engineering (POWERCOIN’20), Sona College of Technology, Salem during March 12-13,2020.