

## **DR. L. RAVI SRINIVAS**

Department: Electrical and Electronics Engineering

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### **RESIDENTIAL ADDRESS:**

102, Brindavanam Apartment, Opp. KKR Gowtham School, Bypass Road, Santhi Nagar  
GUDIVADA-521301. Krishna District. (AP)

### **ACADEMIC QUALIFICATIONS: Ph.D**

### **ACADEMIC REWARDS / ACHIEVEMENTS: Nil**

### **PROFESSIONAL EXPERIENCE:**

| <b>Designation</b>  | <b>Institution</b>                            | <b>Period</b>            |
|---------------------|---|--------------------------|
| Professor           | Gudlavalleru Engineering Collge, Gudlavalleru | Dec, 2020 to till date   |
| Professor & HOD     | Gudlavalleru Engineering Collge, Gudlavalleru | July 2017 to Dec, 2020   |
| Professor           | Gudlavalleru Engineering Collge, Gudlavalleru | Nov., 2011 to July 2017  |
| Associate Professor | S.R.K.R. Engineering College, Bhimavaram      | Dec., 2006 to Aug., 2011 |
| Assistant Professor | S.R.K.R. Engineering College, Bhimavaram      | Nov., 2000 to Nov., 2006 |
| Assistant Professor | A.S.R. College of Engineering, Tanuku         | Aug.,2000 to Nov., 2000  |

### **PROJECTS GUIDED:**

| <b>PhD</b>     |                 | <b>Post Graduation</b> | <b>Under Graduation</b> |
|----------------|-----------------|------------------------|-------------------------|
| <b>Awarded</b> | <b>Pursuing</b> | <b>10</b>              | <b>40</b>               |
| <b>4</b>       | <b>1</b>        |                        |                         |

### **SPECIALIZATION: Power Systems**

## RESEARCH PAPERS / BOOKS:

### BOOKS PUBLISHED IN PUBLICATIONS: 1 (book-chapter)

L.R.Srinivas, and K.Vaisakh, “Unit commitment by Evolving Ant Colony Optimization”, **Book Chapter Published in “Innovations and Development of Swarm Intelligence Applications”**, pp.207-218, IGI Global Publishers, ISBN No. 9781466615922, 2012.

### PAPERS PUBLISHED IN JOURNALS: 36

1. DVR Based Power Quality Enhancement Using Adaptive Particle Swarm Optimization (APSO) Technique, International *Journal of Bio-Inspired Computation, Inderscience* (**Impact factor: 1.914**), Accepted-In Production
2. Genetic Evolving Ant Direction PSO Algorithm for OPF with non-smooth cost functions and statistical analysis, K. Vaisakh, L.R. Srinivas, Kala Meah, *International Journal of Applied Soft Computing* (SCI-Expanded), *Elsevier* (**Impact factor: 2.857, SNIP: 2.143, SJR: 1.763**), Vol. 13, Issue 12, pp. 4579-4593, Dec., 2013. ISSN: 1568-4946
3. Genetic Evolving Ant Direction PSODV Algorithm for OPF with non-smooth cost functions, K. Vaisakh, L.R. Srinivas, Kala Meah, *International Journal of Electrical Engineering (SCI)*, *Springer* (**Impact factor: 0.662**), Vol. 95, pp. 185–199, 2013. ISSN: 1432-0487.
4. Genetic Evolving Ant Direction HDE for OPF with non-smooth cost functions and statistical analysis, K. Vaisakh, L.R. Srinivas, *International Journal of Expert Systems with Applications* (SCI-Expanded), *Elsevier* (**Impact factor: 2.981, SNIP: 2.561, SJR: 1.839**), Vol. 38, Issue 3, pp. 2046-2062, Mar., 2011. ISSN: 0957-4174.
5. Evolving Ant Colony Optimization Based Unit Commitment, K. Vaisakh, L.R. Srinivas, *International Journal of Applied Soft Computing* (SCI-Expanded), *Elsevier* (**Impact factor: 2.857, SNIP: 2.143, SJR: 1.763**), Vol. 11, Issue 2, pp. 2863-2870, March, 2011. ISSN: 1568-4946.
6. Evolving Ant Direction Differential Evolution for OPF with non-smooth cost functions, K. Vaisakh, L.R. Srinivas, *International Journal of Engineering Applications of Artificial Intelligence* (SCI-Expanded), *Elsevier* (**Impact factor: 2.368, SNIP: 2.148, SJR: 1.371**), Vol. 24, Issue 3, pp. 426-436, April, 2011. ISSN: 0952-1976.
7. Adaptive PSODV algorithm for OPF with non-smooth cost functions and statistical analysis, K. Vaisakh, L.R. Srinivas, *International Journal of Simulation, Modeling, Practice and Theory* (SCI-Expanded), *Elsevier* (**Impact factor: 1.482, SNIP: 1.591, SJR: 0.724**), Vol. 19, Issue 2, pp. 1824-1846, Feb., 2011. ISSN: 1569-190X.
8. A Genetic Evolving Ant Direction DE for OPF with non-smooth cost functions and statistical analysis, K. Vaisakh, L.R. Srinivas, *International Journal of Energy* (SCI), *Elsevier* (**Impact factor: 4.252, SNIP: 1.898, SJR: 2.350**), Vol. 35, Issue 8, pp. 3155-3171, Aug., 2010. ISSN: 0360-5442.

9. APSO Based SAPF For Current Harmonic Mitigation In Distributed Power Systems, *Open Engineering* (ESCI- Under Review).
10. Enhancement Of Power Quality Based On VSHDE Algorithm Incorporating DVR, *Journal of Electrical Engineering, Politehnica* (Impact factor: 0.967), Volume 18, Edition 3, pp 189-196, 2018, ISSN: 1582-4594.
11. A New Approach Based on Variable Scaling Hybrid Differential Evolution for Unit Commitment Problem, *Journal of Engineering and Applied Sciences, Medwell journals*, 13 (Special Issue 3), 3314-3320, 2018, ISSN: 1816-949X.
12. Unit Commitment by Lagrangian Relaxation Incorporating Differential Evolution, *Journal of Electrical Engineering, Politehnica* (Impact factor: 0.967), Volume 15, Issue 3, pp. 1-7, 2015. ISSN: 1582-4594.
13. An Evolving Ant Direction Hybrid Differential Evolution for OPF with non-smooth cost functions, K. Vaisakh, L.R. Srinivas, Kala Meah, *Australian Journal of Electrical and Electronics Engineering* (Impact factor: 0.071, SJR: 0.13), Taylor and Francis, Vol. 9, No. 1, pp 1-16, 2012. ISSN: 1448-837X.
14. Enhancement of power quality Based on VSHDE Algorithm incorporating UPQC, *International Journal of Electrical Engineering and Informatics*, Paper. Id: L18-07387 (Scopus -revised and sent with modifications).
15. Power Quality Improvement based on VSHDE Algorithm Incorporating Shunt Active Power Filter, *Journal of advanced research in dynamical and control systems*, Paper. Id: 32295 (Scopus - Under Review).
16. Optimal Power Controller Based Voltage and frequency Control of DG Unit in an Island Mode Microgrid Using Hybrid differential Evolution, *Journal of Electrical Engineering, Politehnica* (Impact factor: 0.967).
17. Optimization of Helical Spring Weight using Metaheuristic Algorithms, *Trends in Machine Design, STM Journals*, Volume 5, Issue 2, pp 21-28, 2018, ISSN: 2455-3352.
18. Power Quality Improvement Based on PSO Algorithm Incorporating UPQC, *Journal of Engineering and Technology*, Vol.9, No.1, Jan-June 2018, ISSN: 2180-3811.
19. Power Quality Improvement Based On PSO Algorithm Incorporating UPQC, *Journal of Engineering and Technology*, Vol. 9 No. 1 Jan – June 2018, ISSN: 2180-3811.
20. Improved Hybrid Differential Evolution to solve Unit Commitment Problem of Thermal generators, *International Journal of Latest Trends in Engineering and Technology*, Volume 9, Issue 2, Nov., 2017, UGC Indexed (Impact factor: 4.490).

21. Enhancement of Power Quality with Sliding Mode Controlled Hybrid Active Power Filter based on Variable Scaling Hybrid Differential Evolution, International Journal of Engineering Research and Technology (**Impact factor: 1.76**), Vol. 4, Issue 10, Oct., 2015, ISSN: 2278 – 0181.
22. Multilevel Inverter Hybrid DSTATCOM Topology for Power Quality Improvement, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (**Impact factor: 1.686**), Vol. 4, Issue 9, Sep., 2015, ISSN: 2278 – 8875.
23. Mitigation of Power Quality Disturbances Using UPQC based on HDE Optimization Technique, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (**Impact factor: 1.686**), Vol. 6, Issue 6, Jun., 2015, ISSN: 2278 – 8875.
24. Hybrid Differential Evolutionbased Concurrent Relay-PID Control for Motor Position Servo Systems, International Journal of Innovative Research in Research in Science, Engineering and Technology, Vol. 4, Issue 6, Jun., 2015, ISSN: 2319 – 8753.
25. Tuning of PID Controllers Using Hybrid Differential Evolution, K. Lakshmi Sowjanya, L. Ravi Srinivas, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (**Impact factor: 1.686**), Vol. 3, Issue 12, pp. 14037-14046, Dec., 2014, ISSN: 2278 – 8875.
26. Identification and Mitigation of Power Quality Disturbances by Shunt Active Power Filter using Particle Swarm Optimized – Wavelet Transform Technique, G. Aditya, B. Meahesh Babu, L. Ravi Srinivas, S.S. Tulasiram, International Journal of Engineering Research and Technology (**Impact factor: 1.76**), Vol. 3, Issue 10, pp. 501-507, Oct., 2014, ISSN: 2278 – 0181.
27. AI based STATCOM for Power Quality Enhancement, Ravikanth Mopidevi, L. Ravi Srinivas, B.Mahesh Babu, S.S.Tulasiram, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (**Impact factor: 1.686**), Vol. 3, Issue 8, pp. 11315-11324, Aug., 2014, ISSN: 2278 – 8875.
28. Design of Shunt Active Power Filter for Improvement of Power Quality with Artificial Intelligence Techniques, B.Venkata Siva, B.Mahesh Babu, L. Ravi Srinivas, S.S.Tulasiram, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (**Impact factor: 1.686**), Vol. 3, Issue 8, pp. 11304-11314, Aug., 2014, ISSN: 2278 – 8875.
29. Differential Evolution Based Power Quality Disturbance Identification and Mitigation in Power Systems, K. Veera Sukumar, L. Ravi Srinivas, B. Mahesh Babu, S.S. Tulasiram, International Journal

- of Scientific Research (**Impact factor: 1.8651**), Vol. 3, Issue 1, pp. 164-168, Jan., 2014. ISSN: 2277-8179.
30. Particle Swarm Optimization for Power Quality Improvement Based on Shunt Active Power Filter, A. Balakrishna, B. Mahesh Babu, L. Ravi Srinivas, S.S. Tulasiram, International Journal of Scientific Research (**Impact factor: 1.8651**), Vol. 3, Issue 1, pp. 158-163, Jan., 2014. ISSN: 2277-8179.
  31. 15. Identification and Mitigation of Disturbance with Active filters Based on Soft Computing Techniques, , International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (**Impact factor: 1.686**), Vol. 3, Issue 8, Aug., 2014, ISSN: 2278 – 8875.
  32. Modeling and Simulation of Switched Reluctance Motor Double Closed Loop Control System, P. Prasanna Lakshmi, L. Ravi Srinivas, International Journal of Innovative Research and Development, Vol. 1, Issue 8, pp 546-562, Oct., 2012. ISSN: 2278-0211.
  33. Unit Commitment by Evolving Ant Colony Optimization, K. Vaisakh, L.R. Srinivas, *International Journal of Swarm Intelligence and Research, IGI Global*, Vol. 1, No. 3, pp 67-77, Jul-Sep, 2010. ISSN: 1947-9263.
  34. Evolving Ant Direction PSO-DV Algorithm for OPF with non-smooth cost functions and statistical analysis, L.R. Srinivas, K. Vaisakh, *International Journal on Power System optimization, International Science Press*, Vol.1, No.2, pp 171-181, Jul.-Dec., 2009. ISSN: 0975-458X.
  35. Unit commitment by Lagrangian Relaxation Incorporating Optimal Power Flow by Particle Swarm Optimization, K. Vaisakh, L.R. Srinivas, *International Journal on Power, Energy and Artificial Intelligence*, Vol.1, No.3, pp 173-182 Dec., 2009. ISSN: 1985-6431.
  36. Differential Evolution Approach for Optimal Power Flow solution, K. Vaisakh, L.R. Srinivas, *Journal of Theoretical and Applied Information Technology*, Vol.4, No.4, pp.261-268, April, 2008. ISSN: 1817-3195.

## PAPERS PUBLISHED IN CONFERENCES/WORKSHOPS: 23

1. A New Approach Based On Variable Scaling Hybrid Differential Evolution for Unit Commitment Problem, International Conference on Innovative Research in Engineering and Science (IRES-2017), 16-17 June 2017, Asian Institute of Technology, Thailand.
2. Hybrid Differential Evolution Based Unit Commitment Combined with Lagrangian Relaxation, *10<sup>th</sup> International Conference on Industrial and Information Systems (ICIIS)*, Sri Lanka, 17<sup>th</sup>-20<sup>th</sup> Dec., 2015 (**IEEE Xplore**).
3. Enhancement Of Power Quality Through Particle Swarm Optimization, L. Ravi Srinivas, B. Mahesh Babu, S. S. Tulasiram, *GEM'14: The 2014 International Conference on Genetic & Evolutionary Methods*, July 21-24, 2014, Las Vegas, Nevada, USA.
4. Non-linear Interior Point OPF Incorporating Static Synchronous Series Compensator for Improvement

of Voltage Stability Margins, K. Vaisakh, L.R. Srinivas, *International Power Engineering Conference, IPEC-2007*, Singapore, Dec., 2007.

5. Voltage and Frequency control of Distribution Generation Unit in an Island Mode Microgrid Using Differential Evolution, International Conference on Intelligent Computing and Control Systems(ICICCS2018), Jun, 2018, VAIGAI College of Engineering, Madurai, Tamilnadu, (**IEEE Xplore**).
6. A MLI Topology with Different Braking Mechanisms Employing BLDC Drive, *IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017)*, Chennai, 2017, 978-1-5386-0814-2/17/\$31.00 ©2017 IEEE, (**IEEE Xplore**).
7. Multilevel Inverter Hybrid DSTATCOM Topology For Power Quality Improvement, *Proceedings of International Conference on Current Innovations in Engineering and Technology*, Oct., 2015, ISBN: 978-1514782-127.
8. Differential Evolution based Concurrent Relay PID Control for Motor Position Servo Systems *International Conference on Emerging Trends in Engineering Research (ICETER)*, Chennai, 14<sup>th</sup> Jun., 2015.
9. Tuning of PID Controllers Using Particle Swarm Optimization, *International Conference on Electrical, Electronics and Computer Engineering (ICEECE)*, Chennai, 14<sup>th</sup> Dec, 2014.
10. Differential Evolution based STATCOM for Power Quality Enhancement, L. Ravi Srinivas, B. Mahesh Babu, Ravikanth Mopidevi, S. S. Tulasi Ram, *ICIEEE2014*, Gurunank College of Engineering, Hyderabad, 5<sup>th</sup> -6<sup>th</sup>, September, 2014.
11. Identification and mitigation of disturbance with Active Filters based on Neural Networks, L. Ravi Srinivas, B. Mahesh Babu, Muktevi Anusha, S. S. Tulasi Ram, *ICIEEE2014*, Gurunank College of Engineering, Hyderabad, 5<sup>th</sup> -6<sup>th</sup>, September, 2014.
12. Mitigation of disturbances by shunt active power filter using Wavelet transforms, L. Ravi Srinivas, B. Mahesh Babu, G. Aditya, S. S. Tulasi Ram, *ICIEEE2014*, Gurunank College of Engineering, Hyderabad, 5<sup>th</sup> -6<sup>th</sup>, September, 2014.
13. A comparative analysis for Enhancement of Power Quality with PSO Technique, L. Ravi Srinivas, B. Mahesh Babu, B. Venkata Siva, S. S. Tulasi Ram, *ICIEEE2014*, Gurunank College of Engineering, Hyderabad, 5<sup>th</sup> -6<sup>th</sup>, September, 2014.
14. Unit Commitment by Genetic Evolving Ant Colony Optimization, K. Vaisakh, L.R. Srinivas, *International Conference on Biologically Inspired Computing and Applications (BICA-09)*, Dec., 2009, Bhubaneswar, Orissa, India (**IEEE Xplore**).
15. Particle Swarm with Differentially Perturbed Velocity (PSO-DV) Algorithm for OPF solution, K. Vaisakh, L.R. Srinivas, *International Conference on Energy and Environment (ENVIROENERGY-2009)*, Mar., 2009, National Institute of Technology, Kurukhetra, Haryana, India.

16. Determination of Real Power Generation Settings for Minimum Cost using Hybrid Differential Evolution, K. Vaisakh, L.R. Srinivas, *International Conference on Energy Engineering (ICEE-09)*, Jan., 2009, Pondicherry Engineering College, Puducherry, India.
17. Differential Evolution based OPF with Conventional and Non-conventional Cost Characteristics, K. Vaisakh, L.R. Srinivas, *IEEE Power India Conference (POWERCON-2008)*, Oct., 2008, New Delhi, India (**IEEE Xplore**).
18. Differential Evolution Approach for Optimal Power Flow solution, K. Vaisakh, L.R. Srinivas, *International Conference on Power System Analysis, Control and Optimization (PSACO)*, Mar., 2008, College of Engineering, Andhra University, Visakhapatnam, AP, India.
19. Improvement of Voltage Stability Margins with OPF Incorporating Static Synchronous Series Compensator, K. Vaisakh, L.R. Srinivas, *International Conference on Modeling and Simulation, MS-07*, Dec., 2007, University of Calcutta, Kolkata, India.
20. Mitigation of Voltage Sag and Current Harmonics using UPQC based on DE Optimization Technique, G. Harish Kumar Varma, L. Ravi Srinivas, B. Mahesh Babu, *2<sup>nd</sup> National conference on Power Systems (NCPS-2015)*, Sep, 2015, College of Engineering, Andhra University, Visakhapatnam, AP, India.
21. Unit Commitment by Lagrangian Relaxation Incorporating Particle Swarm Optimization, L. Ravi Srinivas, M. Ramu, S. Tara Kalyani, *National conference on Contemporary Control (ConCon-2014)*, Nov., 2014, College of Engineering, Andhra University, Visakhapatnam, AP, India.
22. Power Quality Enhancement Using Differential Evolution, L. Ravi Srinivas, B. Mahesh Babu, S. S. Tulasi Ram, *National conference on Power Systems (NCPS-2014)*, May, 2014, College of Engineering, Andhra University, Visakhapatnam, AP, India.
23. Voltage Stability Margins Enhancement with OPF Incorporating Unified Power Flow Controller, K. Vaisakh, L.R. Srinivas, *National conference on Emerging Trends in Power Systems (ETPS-07)*, Feb. 2007, K. L. N. College of Engineering, Pottapalayam, Madurai, Tamil Nadu, India.

## **LIST OF WORKSHOPS ORGANIZED:**

- Organizes an One-week faculty development programme on “Application of Artificial Intelligence and Soft Computing Techniques to Electrical Engineering” during 13th - 17th Nov, 2018.
- Organized an International Conference “Computational and Intelligent Techniques for Automation of Engineering Systems (CITAES-18)” during Nov 30-Dec 1, 2018 combinedly with ECE department
- Convener for GECFEST’16 (A technical, literary, cultural, sports and games event of Gudlavalleru Engineering College) with a budget of more than 40 lacs.

## LIST OF WORKSHOPS /CONFERENCES /SEMINARS ATTENDED: 10

| <b>SHORT TERM COURSES ATTENDED</b> |  |  |      |          |
|------------------------------------|--|--|------|----------|
| Sl. No.                            | Name of the Course   | Organization where training was received | Year | Duration |
| 1                                  | Effective Teaching And Learning Of Artificial Intelligent Techniques For Smart Grid Applications | Nit, Warangal                            | 2018 | 1 WEEK   |
| 2                                  | Advanced Engineering Optimization Through Intelligent Techniques                                 | SVNIT, SURAT                             | 2015 | 1 WEEK   |
| 3                                  | Application Of Soft Computing Techniques To Power System Operation And Control (Asct-2007)       | Andhra University, Visakhapatnam, Ap     | 2007 | 3 DAYS   |
| 4                                  | Power System Optimization Techniques In The Presence Of Facts Devices (Psot-2007)                | Andhra University, Visakhapatnam, Ap     | 2007 | 3 DAYS   |
| 5                                  | Matlab Basic Module And Tool Boxes   | Andhra University, Visakhapatnam, Ap     | 2006 | 2 DAYS   |

| <b>WORKSHOPS ATTENDED</b> |                            |   |      |          |
|---------------------------|----------------------------|---|------|----------|
| Sl.No.                    | Theme Of The Workshop      | Organization Where Workshop Was Held              | Year | Duration |
| 1                         | ABET Accreditation Process | Anurag Group Of Institutions, Hyderabad And IUCEE | 2012 | 3 DAYS   |

| <b>CONFERENCES ATTENDED</b> |   |  |      |
|-----------------------------|---|--|------|
| Sl. No.                     | Conference/Seminar  | Title of paper   | Year |
| 1                           | International Symposium On Biologically Inspired Computing And Applications (Bica 09), Bhubaneshwar     | Unit Commitment By Genetic Evolving Ant Colony Optimization          | 2009 |
| 2                           | International Conference On Power System Analysis, Control And Optimization (Psaco-2008), Visakhapatnam | Differetial Evolution Approach For Optimal Power Flow Solution       | 2008 |
| 3                           | International Conference On Modeling And Simulation (Ms 07), Kolkata                                    | Improvement Of Voltage Stability Margins With Opf Incorporating Sssc | 2007 |
| 4                           | National Conference On Emerging Trends In Power Systems (Etps-07), Madurai                              | Voltage Stability Margins Enhancement With Opf Incorporating Upfc    | 2007 |



**CERTIFICATIONS: Nil**

**GUEST LECTURES DELIVERED: 1**

**MEMBERSHIP IN PROFESSIONAL BODIES:**

Fellow of Institution of Engineers (India). Membership No. F-1209864

**CONSULTANCY ACTIVITIES: Nil**

**GRANTS FETCHED: Nil**