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Address :



Present Position

Professor, Department of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai from February-2017.

Present Additional Responsibility

- Deputy Director, Centre for University Industry Collaboration, Anna University, Chennai.

Previous Positions

- Professor, Faculty of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai from February-2017.
- Associate professor, Faculty of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai during February-2014 and February-2017.
- Assistant Professor, Department of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai during December-2003 and February-2014.
- Teaching Research Associate, Department of Instrumentation Engineering, Madras Institute of Technology, Anna University, Chennai during August-2001 and December-2003.

Previous Additional Responsibility

- Advisor, Robotics Club, College Of Engg Guindy, , Anna University, Chennai during June-2015 and May-2018.
- Additional Chief Superintendent Of Examinations Ug, College of Engineering Guindy, Anna University, Chennai during September-2012 and December-2012.
- Additional Chief Superintendent Of Examinations Ug, College of Engineering Guindy, Anna University, Chennai during March-2012 and May-2012.
- Nri Students Counselor, Department of Electrical and Electronics Engineering, Anna University, Chennai during May-2011 and May-2016.
- Additional Chief Superintendent Of Examinations Pg, Department of Electrical and Electronics Engineering, Anna University, Chennai during June-2007 and December-2007.

- Programme Officer, National Cadet Corps, Anna University, Chennai during February-2006 and March-2008.

Other Employment

- Lecturer, Dept. of EEE,, Kumaraguru College of Technology, Coimbatore for 1.5 Years (AY 2000 - 2001).

Degree

- ❖ M.E. in POWER SYSTEMS ENGINEERING , Faculty of Engineering, Annamalai University (1998 - 1999).
- ❖ B.E. in ELECTRICAL AND ELECTRONICS ENGINEERING , K S Rangasamy College of Technology, University of Madras (1994 - 1998).

Research Degree

- ❖ Ph.D. in Control Engineering from Faculty of Electrical Engineering, College of Engineering Guindy, Anna University (2001 - 2009).
Title: Design of Advanced Robust Controllers for Variable Structure Systems.

Area of Specialisation

- Linear and Nonlinear Systems
- Modeling and control
- Renewable Energy Sources
- Power Converters and Energy Storage Systems
- Sensors and Transducers
- Micro Electro Mechanical Systems (Sensors and Actuators)
- Soft Computing and Optimization

Membership in Professional Organization

- Life member in Indian Society for Technical Education
- Life member in System Society of India (Membership Id # LM2403)
- Life member in Society of Power Engineers-India
- Life member in Quality Circle Forum of India (QCFI) (Membership Id # 04 99 20 116343)

- Life Member in Vibha India (Vijnanabharati), Membership Id #7444

Research Guidance

Number of Ph.D Scholars Guided	: 3
Number of Ph.D Scholars Guiding	: 3
Number of M.E./ M.Tech. Projects Guided	: 43
Number of M.E./ M.Tech. Projects Guiding	: 4

Papers Published in Journals

Research Papers Published in International Journals	: 28
Research Papers Published in National Journals	: 0

1. S. Jeevananthan, A. Ilayaraja and K. Udhayakumar, "Passive Filter Elements Selection – An Analytical Approach and Recommendations for Single Phase Square Wave, Multilevel and PWM Inverters", International Journal of Electrical Engineering and Embedded Systems, published by Research Science Press, New Delhi. Vol. 2, Issue 1, pp. 71-78 (2010).
2. V M Varatharaju, B L Mathur and K.Udhayakumar, " Comprehensive Model of a Trapezoidal PMBLDC Motor and Drive System Performance with PI Speed Controller", AMSE journals , published by Association for advancement of Modeling and Simu. Vol. 65, Issue 1, (2010).
3. Gowri sankar. P. A, K. Udhayakumar, "Mechanical and Electrical properties of single walled carbon nanotubes: A Computational Study", European Journal of Scientific Research, published by EuroJournals. Vol. 60, pp. 342-358 (2011).
4. Varatharaju VM B L Mathur and Udhayakumar K, " Adaptive Neuro-Fuzzy Speed Controller for Hysteresis Current Controlled PMBLDC Motor Drive", International Journal of Advances in Engineering and Technology, (IJAET), published by IJAET. Issue 4, pp. 212-223 (2011).
5. V M Varatharaju, B L Mathur and K.Udhayakumar, "Adaptive Controllers for Permanent Magnet Brushless DC Motor Drive System using ANFIS", American Journal of Applied Science, published by AJAS. Vol. 8, Issue 8, pp. 810-815 (2011).
6. V M Varatharaju, B L Mathur and K.Udhayakumar, "A comparative Study with modeling and Simulation of Torque Ripple Reduction Techniques in BLDC Motor", European Journal of Scientific Research, published by EuroJournals. Vol. 52, pp. 295-305 (2011).
7. V M Varatharaju, B L Mathur and K.Udhayakumar, "Current Regulated PWM Based Control For Four-Switch Three-Phase Brushless DC Motor Drives", International Review of Electrical Engineering (IREE), published by IREE. Vol. 4, (2011).
8. V M Varatharaju, B L Mathur and K.Udhayakumar, " Recursive Least Square Algorithm Based Selective Current Harmonic Elimination in PMBLDC Motor Drive", International Journal of Computer Applications (IJCA), published by IJCA. Vol. 30, Issue 4, pp. 32-38 (2011).

9. V M Varatharaju, B L Mathur and K.Udhayakumar, "Adaptive Selective Current Harmonic Cancellation Algorithm for PMBLDC Motor Drive", International Review of modeling and simulation (IREMOS) , published by IREMOS. Vol. 4, (2011).
10. P. A. Gowri sankar and K. Udhayakumar, "Electronic Properties of Boron and Silicon Doped (10, 0) Zigzag Single-Walled Carbon Nanotube upon Gas Molecular Adsorption: A DFT Comparative Study", Journal of Nanomaterials, published by Journal of Nanomaterials. Vol. 2013, pp. Article ID 293936 (2013).
11. P. A. Gowri sankar and K. Udhayakumar, "Design and Analysis of Low Power, Delay Optimized Digital Buffer Based on CNFET Technology", International Journal of NanoScience and Nanotechnology, published by International Journal of NanoScience and Nanotechn. Vol. 4, Issue 2, pp. 181-193 (2013).
12. P. A. Gowri sankar and K. Udhayakumar, "Pull-in Voltage Analysis of Carbon Nanotube based Electrostatic Actuators by using the ANSYS Software", Advanced Materials Research, published by Advanced Materials Research. Vol. 818, pp. 117-123 (2013).
13. P. A. Gowri sankar and K. Udhayakumar, " A Novel Carbon Nanotube Field Effect Transistors Based Low-Voltage DC-DC Buck Converter for Maximum Efficiency", Asian Journal of Chemistry, published by Asian Journal of Chemistry. Vol. 25, pp. 290-292 (2013).
14. Gowri Sankar P A & Udhayakumar K, " Ternary Flip-Flops Based on Emerging Sub-32 nm Technology Nodes", Journal of Low Power Electronics, published by American Scientific Publishers. Vol. 10, pp. 1-5 (2014).
15. Gowri Sankar P A & Udhayakumar K, "A Novel Carbon Nanotube Field Effect Transistor Based Arithmetic Computing Circuit for Low-power Analog Signal Processing Application", Procedia Technology, published by Elsevier. Vol. 12, pp. 154-162 (2014).
16. Raja R, Udhayakumar K, " Development in Smart Sensor Network for Energy Saving", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, published by IJAREEIE. Vol. 3, Issue 2, pp. 511 - 516 (2014).
17. P. A. Gowri sankar and K. Udhayakumar, "MOSFET-like CNFET based Logic Gate Library for Low-Power Application: A Comparative Study", Journal of Semiconductors, published by Journal of Semiconductors. (2014).
18. P. A. Gowri sankar and K. Udhayakumar, "A Novel Carbon Nanotube Field Effect Transistor Based Analog Signal Processing Circuits for Low-power Communication System", Lecture Notes in Electrical Engineering, published by Springer. Vol. 298, (2014).
19. Sreedhar, T & Udhayakumar K, "Supply Voltage Fluctuation Immune SHEPWM For Multilevel Inverters Working With Fluctuating Dc Sources", International Journal Of Advanced Engineering Technology, published by International Journal Of Advanced Engineering Tech. Vol. 7, Issue 1, pp. 622-631 (2015).
20. Sreedhar T & Udhayakumar K, " Negative Harmonics Injection Cuddled Equal Area Criteria Based Selective Harmonic Elimination Pulse Width Modulation Techniques For Multilevel Cascaded Inverters", Journal of Computational And Theoretical Nanoscience, published by Journal of Computational And Theoretical Nanoscience. pp. Ref number CTN 20-980-112 (2016).

21. Sreedhar T & Udhayakumar K, "Genetic Algorithm Based Selective Harmonic Elimination Technique For Multilevel Inverters With Unequal Voltage Sources", Association for advancement of Modeling and Simulation techniques in Enterprises, published by AMSE. pp. Paper number 13511 (2016).
22. T. Ramachandran T. Sreedhar, K. Udhayakumar, E. Aswini, "A Single Phase Modified H-Bridge Seven Level Inverter with Reduced Power Electronic Switches", International Journal of Control Theory and Applications, published by International Science Press, Gurgaon, India. Vol. 10, Issue 29, pp. 273 - 283 (2017).
23. Annamalai Thiruvengadam, K Udhayakumar, "An Enhanced H-Bridge Multilevel Inverter with Reduced THD, Conduction, and Switching Losses Using Sinusoidal Tracking Algorithm", Energies, published by MDPI, Open Access Journal. Vol. 12, Issue 1, pp. 1-22 (2018).
24. Annamalai Thiruvengadam, K Udhayakumar, "A new multi-level inverter with reduced number of switches based on modified H-bridge", International Journal of Power Electronics, published by Inderscience Publishers (IEL). Vol. 10, Issue 1, pp. 49-64 (2019).
25. Manikannan Palanivel & Udhayakumar Kaithamalai, "Fuzzy based MPPT Technique for Photovoltaic System with Boost and Super lift Boost Converters", Journal of Electrical Engineering, published by EP. Vol. 19, Issue 8, pp. 80- 87 (2019).
26. Shijin C S and K. Udhayakumar, "Path Tracking Controller Design of Differentially Driven Wheeled Mobile Robots using Cascaded Adaptive PID Controller", Interciencia Journal, published by Interciencia. Vol. 45, Issue 1, pp. 1-8 (2020).
27. Krishnamoorthy R , Udhayakumar K, Kannadasan Raju, Rajvikram Madurai Elavarasan, and Lucian Mihet-Popa, "An Assessment of Onshore and Offshore Wind Energy Potential in India Using Moth Flame Optimization", Energies, published by MDPI. Vol. 13, Issue 3063, pp. 1-41 (2020).
28. Manikannan Palanivel & Udhayakumar Kaithamalai, "A Comparative Analysis of Intelligent Controller Based MPPT for Photovoltaic System with Super Lift Boost Converter", Technical Gazette, published by Croatia. Vol. 27, Issue 2, pp. 589-596 (2020).

Papers Presented in Programmes

Research Papers Presented in International Programmes	: 14
Research Papers Presented in National Programmes	: 9

1. T Annamalai, K Udhayakumar, "Simulation and Analysis of Various H-Bridge Inverter Topologies Employed in Cascaded Multi-level Inverter" presented in a International level conference on International Conference on Emerging Trends and Innovations in Engineering and Technological Research (ICETIETR - 2018), organised by Toc H Institute of Technology, Kerala, India .
2. T Annamalai, K Udhayakumar, "A New 23 Level Cascaded Multi-Level Inverter with Optimum Structure" presented in a International level conference on 2018 4th International Conference on Electrical Energy Systems (ICEES), organised by 2018 4th International Conference on Electrical Energy Systems (ICEES), India .

3. Karthick S, Udhayakumar K. and Jeevananthan S , "Control of Electrostatic Micromotor" presented in a National level conference on Proceedings of National Conference on Vision, System, Design and Testing (VSdT'01), organised by IIT Bombay, Powai, India from 13-Mar-2001.
4. Udhayakumar K. and Lakshmi P, "Application of Evolutionary Programming to Estimate Robustness of Stabilizing PID Controllers" presented in a International level conference on Proceedings of International Conference on Trends in Industrial Measurements & Automation (TIMA'04), organised by CEERI, Chennai, India from 15-Apr-2004.
5. Udhayakumar K. and Lakshmi P, "Synthesis of Stabilizing PID Controllers for Nonlinear Systems" presented in a International level conference on Proceedings of International Conference on Intelligence in Engineering Systems, organised by Universiti Malaysia, Sabah, Malaysia from 22-Sep-2004.
6. Udhayakumar K. and Lakshmi P, "Optimal Stabilizing PID Controllers Using Antcolony Optimization" presented in a International level conference on Proceedings of NCEES, organised by Dept of Electrical and Electronics Engineering, GCT-Coimbatore. , India from 14-Jun-2005.
7. Udhayakumar K. and Boobal K, "Posicast Compensated Control of DC-DC Buck Converter" presented in a National level conference on Proceedings of IEEE – ESCT'07 , organised by NIT Calicut, Kerala, India from 22-Mar-2007.
8. Udhayakumar K. and Sankar Raj , "Swing-up and Stabilization of Inverted Pendulum" presented in a National level conference on Proceedings of IEEE-NCES'07, organised by AKCE – Anand Nagar, Srivilliputtur, India from 17-Apr-2007.
9. Chandrasekhar G. and Udhayakumar K, "Sliding Mode Control of a Full-Bridge Rectifier" presented in a National level conference on Proceedings of the National Conference on Power Electronics, Drives and Energy Conversion Systems, organised by Annamalai University, Chidambaram, India from 11-Mar-2008.
10. Raboth Aron P.K., Udhayakumar K. and Lakshmi P, "Design of Two-step Posicast Compensator for a DC-DC Converter" presented in a National level conference on Proceedings of the National Conference on Electrical Engineering and Embedded Systems (NCEEE '08), organised by DEEE, Anna University, Chennai, India from 20-Mar-2008 to 21-Mar-2008.
11. P. Jekan and K. Udhayakumar , "Analysis of Hybrid Phase Locked Loop Using Single Electron and MOSFET Transistors" presented in a National level conference on Proceedings: Third National Conference on Digital Convergence (TNCDC-2010), organised by Chennai, India from 02-Apr-2010.
12. P.A. Gowri sankar and K. Udhayakumar, "Modelling and Analysis of Silicon Nanowire Field Effect Transistor based Inverter" presented in a National level conference on Proceedings of 6th National Conference on Modeling, Identification and Control in Electrical Engineering (NCMIC), organised by KSRCT, Tiruchengode, India from 06-Apr-2010.
13. K. Arun Ganesh and K. Udhayakumar , "Design of Fault Tolerant System for Digital Nanodevice Memories" presented in a National level conference on Proceedings: Third National Conference on Digital Convergence (TNCDC-2010), organised by Chennai, India from 07-Apr-2010.

14. P. Fathima and Udhayakumar, K, "Design of Fuzzy Logic Controller for a DC-DC Converter" presented in a National level conference on Proceedings of National conference on Emerging Technologies in Electrical Engineering (NCEEE-10), organised by VEC, Chennai, India from 26-Apr-2010.
15. M.S. Sachuthananth Magesh and K. Udhayakumar, "Embedded Electro Encephalogram Analyser (eeega)" presented in a International level conference on Proceedings: International Conference on Recent Advances In e-Communications & i-Technologies (REACT – 10, organised by Chennai, India from 10-May-2010.
16. Varatharaju, V.M. Mathur, B.L. Udhayakumar, K, "Speed control of PMBLDC motor using MATLAB/Simulink and effects of load and inertia changes" presented in a International level conference on IEEE 2nd International conference, on Mechanical and Electrical Technology (ICMET), India from 11-Jun-2010.
17. Gowrisankar. P.A. and K. Udhayakumar , "A Study of Single Walled Carbon Nanotubes" presented in a International level conference on Proceedings: International Conference on Nanoelectronics (ICONE -11, organised by Chennai, India from 28-Apr-2011.
18. Varatharaju, V M ; Mathur, B.L. ; Udhayakumar, K., "ANFIS based controllers and modeling simulation of PMBLDC motor and drive system " presented in a International level conference on International Conference on Sustainable Energy and Intelligent Systems (SEISCON 2011), IET, organised by IET & IEEE XPLORE, INDIA from 20-Jul-2011 to 22-Jul-2011.
19. P. A. Gowri sankar and K. Udhayakumar, "Investigating the Effect of Chirality on Coaxial Carbon Nanotube Field Effect Transistor" presented in a International level conference on IEEE International Conference on Computing, Electronics and Electrical Technologies (ICCEET-2012), organised by IEEE, India from 20-Jun-2012.
20. P.A. Gowri Sankar, K. Udhayakumar, "Design of a low volatage 32nm CNTFET Buck Convertor for Maximum Efficiency" presented in a International level conference on International Conference on Nanoscience and Nanotechnology (ICONN 2013), organised by SRM University , India from 18-Mar-2013 to 20-Mar-2013.
21. Viswam S, Sreedhar T & Udhayakumar K , "A Selective Harmonic Elimination Technique For three-phase Multilevel Inverters Working with Unequal Voltage Source" presented in a International level conference on IEEE-International Conference on Research and Development prospects on Engineering and Technology (ICRDPET 2013), organised by E.G.S Pillai Engineering College, Nagapattinam, India from 29-Mar-2013.
22. Sreedhar T & Udhayakumar K, "Comparison Of Genetic Algorithm And Newton-Raphson Algorithm Based Selective Harmonic Elimination Techniques For Multilevel VSI" presented in a International level conference on Proceeding of International Conference on Advances in control and computing of analog and digital Systems, organised by Coimbatore Institute of Technology, Coimbatore, India from 29-Dec-2014.
23. T. Annamalai, K. Udhayakumar, S. Anitha, D. Pachaikani, P. Sasikumar, M. Mythily, "Energy Efficient Reference Tracking Modified Enhanced H-Bridge Multilevel Inverter" presented in a International level conference on IEEE International Conference on Energy, Systems and Information Processing (ICESIP), organised by IIITDM, Kancheepuram, India from 04-Jul-2019 to 06-Jul-2019.

Programme Chaired

1. Chairman, International level conference titled "IET Chennai 3rd International Conference on Sustainable Energy and Intelligent Systems (SEISCON 2012)" conducted by Dr. MGR University, Chennai.
2. Chairman, National level conference titled "CSIR sponsored National conference on Advances in Electrical Energy Applications" conducted by CSIR & Velammal Institute of Technology from 03-Jan-2013 to 04-Jan-2013.
3. Co Chairman, International level conference titled "IEEE Sponsored International Conference on Soft-Computing and Networks Security (ICSNS 2015) " conducted by IEEE & SNS College of Engineering from 25-Feb-2015 to 27-Feb-2015.
4. Chairman, International level conference titled "IEEE Sponsored International Conference on Circuit, Power and Computing Technologies (ICCPCT 2015)" conducted by Noorul Islam University from 19-Mar-2015 to 20-Mar-2015.
5. Chairman, International level conference titled "National Conference on Innovative Trends in Electrical and Electronics Engineering" conducted by Mailam Engineering College, Mailam, Villupuram from 31-Mar-2015.
6. Chairman, National level conference titled "Seventh National Conference on Signal Processing Communication and VLSI Design (NCSCV 2015)" conducted by Anna University Regional Campus, Coimbatore from 24-Apr-2015 to 25-Apr-2015.
7. Chairman, International level conference titled "TEQIP - II Sponsored International Conference on Contemporary Topics in Power Engineering and Aided Technologies" conducted by Pondicherry Engineering College from 24-Feb-2017 to 25-Feb-2017.

Programme Organized

1. Coordinator, National level workshop on "TEQIP sponsored course on "Virtual Instrumentation"" from 24-Jan-2007 to 25-Jan-2007.
2. Coordinator, National level workshop on "Faculty Development Programme on "Neural Network and Fuzzy Logic Control" from 18-Jun-2007 to 30-Jun-2007.
3. Coordinator - Control & Instrumentation , National level conference on "Electrical Engineering and Embedded Systems (NCEEE 2008)" from 20-Mar-2008 to 21-Mar-2008.
4. Coordinator, National level seminar on "Prof. Kannoth Sugumaran Endowment – Tutorial Workshop on "Control Engineering Applied to Practical Problems" from 16-Oct-2008 to 18-Oct-2008.
5. Working Committee Member, International level conference on "Power, Control and Embedded Systems (ICPCES 2010)" from 08-Dec-2010 to 10-Dec-2010.

Programme Attended

1. Attended a National level seminar on "Re-Engineering Teaching Skills" organized by CPDE, Anna University, India from 25-Feb-2004 to 26-Feb-2004.
2. Attended a International level Short Course on "Recent Trends in FACTS Controllers and Electrical Power Transmission Systems" organized by M S Ramaiah Institute of Technology, Bangalore, India from 09-Aug-2004 to 13-Aug-2004.
3. Participated in a National level workshop on "Recent Trends in FACTS controllers and Electrical Power Transmission Systems" organized by AICTE-ISTE sponsored, MSRIT – Bangalore, India from 09-Aug-2004 to 13-Aug-2004.
4. Attended a National level seminar on "Re-Engineering Teaching Skills – II" organized by CPDE, Anna University, India from 09-May-2005 to 11-May-2005.
5. Attended a National level seminar on "Microcontroller Based Circuit Design" organized by CPDE, DEEE, Anna University, India from 01-Dec-2006 to 02-Dec-2006.
6. Attended a National level Short Course on "Nonlinear Control System" organized by Centre for Faculty Development, Anna University, India from 04-Dec-2006 to 16-Dec-2006.
7. Attended a National level Short Course on "Web enabled Online Monitoring of Multi-area Power systems in Distributed Environment" organized by RCC, Anna University, India from 29-Dec-2006 to 30-Dec-2006.
8. Participated in a National level workshop on "RTOS for Real-time Embedded Applications" organized by TEQIP, CEG, Anna University, India from 01-Feb-2007 to 02-Feb-2007.
9. Attended a National level seminar on "Advanced Control Systems" organized by IISc, Bangalore, India from 03-Feb-2007 to 04-Feb-2007.
10. Attended a National level Short Course on "Energy Audit and Demand Side Management" organized by TEQIP, CEG, Anna University, India from 01-Mar-2007 to 02-Mar-2007.
11. Attended a National level Short Course on "High Voltage Testing techniques" organized by TEQIP, CEG, Anna University, India from 08-Mar-2007 to 09-Mar-2007.
12. Attended a National level seminar on "Mentoring Youth and Adolescents" organized by TEQIP, CEG, Anna University, Centre for Empowerment of Women, India from 16-Mar-2007.
13. Participated in a National level workshop on "Pollution of Power Supply - Causes and Mitigation" organized by Dept.of EEE, Anna University, Chennai, India from 21-Mar-2007 to 22-Mar-2007.
14. Attended a National level Short Course on "Training Programme of Faculty of Engineering Colleges and Management Institutes" organized by AICTE and Indian Heritage Academy, Bangalore, India from 04-Oct-2007 to 05-Oct-2007.
15. Participated in a National level workshop on "Advanced Level International Workshop on Nanoscience and Technology" organized by Dept of Physics, Anna University Chennai., India from 23-Feb-2009 to 27-Feb-2009.

16. Attended a National level Short Course on "Recent Trends in Databases" organized by RCC, Anna University, AICTE-QIP short term course , India from 16-Mar-2009 to 29-Mar-2009.
17. Participated in a International level workshop on "Advances in Nanoscience and Technology" organized by Anna University, Chennai, India from 28-Oct-2009 to 30-Oct-2009.
18. Attended a National level Short Course on "Smart Operation and Control of Electrical Machines and Power Systems" organized by Pondicherry Engineering College, India from 02-Jun-2010 to 12-Jun-2010.
19. Attended a National level Short Course on "Fatigue of Materials and Fracture Mechanics" organized by Centre for International Affairs, AU, Chennai, India from 11-Aug-2010 to 12-Aug-2010.
20. Participated in a International level workshop on "Indo-Italian Advanced Level workshop on "Nanostructures, Ultra thin Films and Applications"." organized by Crystal growth centre, Anna University, Chennai, India from 08-Sep-2010 to 10-Sep-2010.
21. Participated in a International level workshop on "Indo-Swedish International workshop on Applied Engineering." organized by Centre for International Affairs, AU and Royal Institute of Technology – KTH, Sweden and Uppsala University, Sweden, India from 22-Oct-2010.
22. Participated in a International level workshop on "UGC - CAS (Phase - 1) Sponsored Four Days Workshop and Training on MEMS Design Tools" organized by DEEE, Anna University, Chennai. (sponsored by UGC – CAS), India from 28-Mar-2011 to 31-Mar-2011.
23. Participated in a International level workshop on "Two-week ISTE Workshop on Basic Electronics" organized by IIT Bombay, held under the National Mission Education through ICT (MHRD), India from 28-Jun-2011 to 08-Jul-2011.
24. Participated in a International level workshop on "AICTE Staff Development Programme on Fundamentals of Nanoscience and Technology (FONT-2011)" organized by Crystal growth centre, Anna University, Chennai, India from 17-Dec-2012 to 21-Dec-2012.
25. Participated in a International level workshop on "One week CSIR Sponsored Seminar on “ Electrical Drives and Embedded Control” " organized by DEEE, Anna University, Chennai. (sponsored by CSIR), India from 17-Dec-2012 to 21-Dec-2012.
26. Participated in a National level workshop on "Two Week ISTE Workshop on Control Systems" organized by IIT Kharagpur, India from 02-Dec-2014 to 12-Dec-2014.
27. Participated in a National level workshop on "One Day Training Programme on Change Management & Capacity Building to Improve Quality of Service" organized by AU TVS Centre for Quality, Anna University, India from 23-Feb-2016.
28. Participated in a International level workshop on "ISTE Sponsored Two Week Short Term Training Programme On Electric Power System" organized by IIT Kharagpur (through MHRD/ICT), India from 12-Jun-2017 to 15-Jul-2017.
29. Participated in a International level workshop on "Two Week Short-Term Course On PLC and SCADA" organized by NITTTR, Chennai, India from 19-Jun-2017 to 01-Jul-2017.

30. Participated in a National level workshop on "Design the Thinking" organized by School of Design Thinking, Intellect Design Arena, Navalur, Chennai, India from 29-Aug-2018 to 31-Aug-2018.
31. Participated in a International level conference on "International Conference and Exhibition on Information and Communication Technology (Connect 2019)" organized by ELCOT Govt of Tamil Nadu, CII, Ministry of Electronics and IT Govt of India and STPI, Chennai India from 07-Nov-2019 to 08-Nov-2019.
32. Attended a National level Short Course on "Power Electronic Converters in Grid Integration of Renewable Energy Sources, Under the aegis of NaMPET Phase-III, MeitY" organized by Malaviya National Institute of Technology, Jaipur, Rajasthan, India from 27-Dec-2019 to 31-Dec-2019.
33. Participated in a International level conference on "Etap 2020 India" organized by Etap Automation Pvt Ltd, ITC Grand Chola, Guindy, Chennai, India from 13-Feb-2020.
34. Participated in a International level conference on "India Technology Week @ Home 2020" organized by EFY Group, India from 13-May-2020 to 15-Jun-2020.
35. Participated in a National level workshop on "'Comprehensive e-Learning to e-Training Guide for Administrative Work" Sponsored by MHRD, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching " organized by Teaching Learning Centre, Ramanujan College, University of Delhi, India from 25-May-2020 to 05-Jun-2020.
36. Participated in a National level workshop on "Faculty Development Programme on "Advanced Optimization Techniques and hands-on with MATLAB/SCILAB" organized by Electronics & ICT Academy PDPM IIIT DM Jabalpur under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" by MeitY, India from 13-Jul-2020 to 24-Jul-2020.

Special Repräsentations

1. Member in BoS / EEE / Bannari Amman Institute of Technology from 16-May-2012 to 30-May-2014.
2. Member in BoS / EEE / Dr. Mahalingam College of Engg. from 16-Sep-2013 to 31-May-2016.
3. Member in Board of Studies/ EEE/ Saveetha University from 15-May-2013 to 31-May-2016.
4. Member in BoS, University Nominee, EEE, SREC, Coimbatore from 24-Jan-2018 to 30-Apr-2019.
5. BoS Member in Board of Studies in EEE Periyar Maniammai University from 01-Mar-2011 to 30-Oct-2015.
6. Expert Member in Teaching Staff Selection Committee, Sri Venkateswara College from 10-Apr-2014

Invited Lectures

1. Delivered a Lecture on "Basic Electrical and Electronics Engineering" in Guest talk organized by Vel Tech , Chennai (06-Apr-2012).
2. Delivered a Lecture on "Comparison Methods of Measurements and Instrumentation" in Guest Lecture organized by VelTech MultiTech Engineering College, Avadi, Chennai (13-Jul-2012).
3. Delivered a Lecture on "Micro Electro Mechanical Systems: Sensors and Actuators" in One Day Workshop on MEMS & Solid State Drives organized by RVS College of Engg and Technology, Sulur, Coimbatore (17-Jul-2012).
4. Delivered a Lecture on "MEMS Technology" in Guest Lecture organized by Society of EEE Adhiparasakthi Engineering College, Melmaruvathur (17-Sep-2012).
5. Delivered a Lecture on "Control Systems" in Guest talk organized by Veltech High Tech Dr. Rangarajan Dr.Sakunthala Eng, Avadi, Chennai (31-Jan-2013).
6. Delivered a Lecture on "Feedback Control Systems and PID Controllers" in Guest Lecture organized by VelTech MultiTech Engineering College, Avadi, Chennai (31-Jan-2013).
7. Delivered a Lecture on "Control Systems" in Guest Lecture organized by RMK College of Engineering and Technology, Pudukkottai, Gummidipoondi tk (09-Feb-2013).
8. Delivered a Lecture on "Control Systems" in Guest talk organized by RMK College of Engineering and Technology, Chennai (23-Feb-2013).
9. Delivered a Lecture on "Fast Fourier Transform Algorithms and Digital Filter Design" in Guest Lecture organized by SA Engineering College, Chennai (12-Jul-2013).
10. Delivered a Lecture on "Analog and Digital Measuring Instruments" in Guest Lecture organized by VelTech MultiTech Engineering College, Avadi, Chennai (26-Jul-2013).
11. Delivered a Lecture on "Digital Signal Processing" in Guest Lecture organized by RMK College of Engineering and Technology, Pudukkottai, Gummidipoondi tk (03-Aug-2013).
12. Delivered a Lecture on "Modelling of Systems" in Guest Lecture organized by VelTech MultiTech Engineering College, Avadi, Chennai (30-Jan-2014).
13. Delivered a Lecture on "Control Engineering Applications" in Guest Talk organized by RMK College of Engineering, Gummidipoondi (15-Feb-2014).
14. Delivered a Lecture on "Digital Signal Processing" in Anna University sponsored Seven Days FDTP on Digital Signal Processing organized by SSN College of Engineering, Kalavakkam (18-Jun-2014).
15. Delivered a Lecture on "Current Trends in Electrical Technology - An Inaugural address" in EEE Association Inaugural Session organized by Indira Institute of Technology, Thiruvallur, Thiruvallur (18-Jul-2014).
16. Delivered a Lecture on "Control Systems" in Guest Lecture organized by Department of EEE, S A Engineering College, Poonamallee, Chennai (17-Feb-2015).

17. Delivered a Lecture on "Key note address on "Microsensors and Instrumentation - Signal Processing Perspective"" in IEEE Sponsored First International Conference on Soft Computing and Network Security (ICSNS 2015) organized by SNS College of Engineering, Coimbatore (25-Feb-2015).
18. Delivered a Lecture on "Discrete Time Signal Processing" in Guest Lecture organized by RMK College of Engineering and Technology, Pudukkottai, Gummidipoondi tk (07-Mar-2015).
19. Delivered a Lecture on "Key note address on Smart Grid Measurement Science: An IOT Perspective" in IEEE Sponsored International Conference on Circuit, Power and Computing Technologies (ICCPCT 2015) organized by Noorul Islam University, Nagercoil (19-Mar-2015).
20. Delivered a Lecture on "Employability Skills" in RNTBCI Sponsored Employability Skill Enhancement Programme organized by CUIC Anna University & PSG College of Technology, Coimbatore (26-Sep-2015).
21. Delivered a Lecture on "Career Guidance for Employment Opportunities" in Guest Lecture organized by University College of Engineering, Arni, Arni, Tamil Nadu (29-Sep-2015).
22. Delivered a Lecture on "SCADA and its role in Smart Grid " in Three Day Workshop on Smart Grid for TANGEDCO Engineers by Appadurai Chair for Power Systems organized by College of Engineering Guindy, Anna University, Chennai (23-Feb-2016).
23. Delivered a Lecture on "Employability Skills" in Student Development Programme organized by Dept of EEE, Nandha Engineering College, Erode (24-Feb-2016).
24. Delivered a Lecture on "Discrete Time Systems and Signal Processing" in Guest Talk organized by VelTech HighTech Engineering College, Avadi, Chennai (27-Feb-2016).
25. Delivered a Lecture on "Smart Grid - Opportunities and Challenges on IOT Perspectives" in Guest Lecture organized by Vignan University, Guntur, Andhra Pradesh (10-Aug-2016).
26. Delivered a Lecture on "Recent trends in SCADA, Smart Grid and Industrial Automation" in AICTE sponsored Two Weeks FDP organized by Coimbatore Institute of Technology, Coimbatore (13-May-2017).
27. Delivered a Lecture on "SCADA and Automation" in NITTTR, Taramani organized by Two Weeks Short Term Course on PLC and SCADA, Chennai (01-Jul-2017).
28. Delivered a Lecture on "Sliding Mode Controller for DC-DC Converters" in AICTE Sponsored 2 Week FDP on Power Converters, Control and Grid Integration of Renewable Energy organized by SSN College of Engineering, Kalavakkam, Chennai (22-Nov-2017).
29. Delivered a Lecture on "Digital Signal Processing and its Applications" in Faculty Development Training Programme organized by DMI College of Engineering, Palanchur, Chennai (28-Nov-2017).
30. Delivered a Lecture on "Measurements and Instrumentation" in Guest Lecture organized by SA Engineering College, Poonamallee, Chennai (19-Jan-2018).

31. Delivered a Lecture on "Recent Trends in Modern Electrical Engineering" in National Level Technical Symposium E2C - 2018 organized by Dept of EEE, AKT Memorial College of Engineering a, Kallakurichi (22-Mar-2018).
32. Delivered a Lecture on "Basics of Digital Signal Processing" in Guest Lecture organized by Dept. of IT, DMI College of Engineering, Chennai (17-Jul-2018).
33. Delivered a Lecture on "Control Systems" in Guest Lecture organized by Vel Tech Engineering College, Avadi, Chennai (30-Jul-2018).
34. Delivered a Lecture on "Gate way to Career Opportunities for Electrical and Electronics Engineering Students: A Career Guidance" in Guest Lecture organized by MNM Jain Engineering College, Chennai (14-Aug-2018).
35. Delivered a Lecture on "Digital Filter Design" in Guest Lecture organized by Dept. of EEE, S A Engineering College, Chennai (23-Aug-2019).
36. Delivered a Lecture on "Sensors and Transducers" in Special Lecture organized by Veltech Multitech Engineering College, Avadi Chennai (18-Sep-2019).
37. Delivered a Lecture on "Microsensors and Instrumentation" in International Webinar organized by New Horizon College of Engineering, Bengaluru (11-Jun-2020).

Extension & Outreach Programme

1. Lecturer, Web Content Lecture Series on Measurements and Instrumentation (Available in: <http://cfd.annauniv.edu/video-webcontent.html>), participated by Students of Affiliated Engineering Colleges of Anna University, TN and funded by Centre for Faculty Development, Anna University, Chennai - 25 at EMMRC Studio, Anna University during 15-May-2009 and . No. of participants: 0.
2. Speaker, EduSat Live Lecture Series on Digital Signal Processing, participated by Students of Affiliated Engineering Colleges of Anna University, TN and funded by Centre for Faculty Development, Anna University, Chennai - 25 at EMMRC Studio, Anna University during 09-Jul-2013 and 20-Sep-2013. No. of participants: 0.
3. Coordinator, Tamil Nadu State Level Placement Programme (TNSLPP 2014), participated by Students of Affiliated Engineering Colleges (Coimbatore Zone) of Anna University, TN and funded by CUIC, Anna University with the support of M/s. Accenture at P A College of Engineering and Technology, Pollachi, TN during 26-Dec-2014 and 27-Dec-2014. No. of participants: 1875.
4. Coordinator, Tamil Nadu State Level Placement Programme (TNSLPP 2015), participated by Students of Affiliated Engineering Colleges (Tirunelveli Zone) of Anna University, TN and funded by CUIC, Anna University with the support of M/s. Infosys at PSN College of Engineering & Technology, Tirunelveli during 19-Jan-2015 and 20-Jan-2015. No. of participants: 1406.

5. Coordinator, Employability Skill Enhancement Programme (ESEP), participated by Students of Affiliated Engineering Colleges of Anna University, TN and funded by M/s Renault Nissan Technology Business Centre of India (RNTBCI), Chennai at PSNA College of Engineering & Technology, Dindigul during 16-Oct-2015 and . No. of participants: 206.
6. Coordinator, AU - Titan Hackathon 2016, participated by Students of Engineering Institutions across India and funded by M/s. Titan Company Ltd. at PSNA, KPR, Muthayammal, Sairam, Rajalakshmi Engineering Colleges during 29-Feb-2016 and 17-Aug-2016. No. of participants: 1360.
7. Coordinator, AU - Daimler Mobile App Garage 2017 (MAG 2017), participated by Students of Engineering Institutions across India and funded by M/s Daimler Financial Services India Ltd. (DFSI) & M/s Daimler India Commercial Vehicles Pvt. Ltd. (at Rajalakshmi Engineering College, KLN College of Engineering & Muthayammal Engineering College during 04-Jan-2017 and 09-Jan-2017. No. of participants: 1224.
8. Coordinator and Expert Member, UGC (XII Plan) Sponsored Career Guidance Programme, participated by Students of Constituent Colleges (UCEs) of Anna University, TN and funded by UGC (XII Plan) at University College of Engineering, Kanchipuram during 31-Jan-2017 and . No. of participants: 223.
9. Coordinator and Expert Member, UGC (XII Plan) Sponsored Career Guidance Programme, participated by Students of Constituent Colleges (UCEs) of Anna University, TN and funded by UGC (XII Plan) at University College of Engineering, Arni, TN during 01-Feb-2017 and . No. of participants: 246.
10. Coordinator and Expert Member, UGC (XII Plan) Sponsored Career Guidance Programme, participated by Students of Constituent Colleges (UCEs) of Anna University, TN and funded by UGC (XII Plan) at Anna University Tiruchirapalli Campus (BIT) during 10-Feb-2017 and . No. of participants: 350.
11. Coordinator and Expert Member, UGC (XII Plan) Sponsored Career Guidance Programme, participated by Students of Constituent Colleges (UCEs) of Anna University, TN and funded by UGC (XII Plan) at University VOC College of Engg., Tuticorin during 16-Feb-2017 and . No. of participants: 353.
12. Coordinator and Expert Member, UGC (XII Plan) Sponsored Career Guidance Programme, participated by Students of Constituent Colleges (UCEs) of Anna University, TN and funded by UGC (XII Plan) at UCE, Nagercoil during 17-Feb-2017 and . No. of participants: 357.
13. Coordinator, Employability Skill Building Programme (ESBP), participated by Students of Constituent Colleges (UCEs) of Anna University, TN and funded by M/s. Thirdware Solutions, Chennai at University College of Engineering, Kanchipuram during 06-Mar-2017 and 18-Mar-2017. No. of participants: 120.
14. Coordinator and Expert Member, Employability Skill Enhancement Programme (ESEP), participated by Students of Affiliated Engineering Colleges of Anna University, TN and funded by M/s Renault Nissan Technology Business Centre of India (RNTBCI), Chennai at Sri Sairam Engineering College & Rajalakshmi Engineering College, Chennai during 08-Dec-2017 and 19-Dec-2017. No. of participants: 368.

15. Coordinator and Expert Member, Employability Skill Enhancement Programme (ESEP), participated by Students of Affiliated Engineering Colleges of Anna University, TN and funded by M/s Renault Nissan Technology Business Centre of India (RNTBCI), Chennai at Sri Eshwar College of Engineering & Sri Krishna College of Engineering, Coimbatore during 02-Jan-2018 and 12-Jan-2018. No. of participants: 568.
16. Coordinator, Tamil Nadu State Level Placement Programme (TNSLPP 2018), participated by Students of Affiliated Engineering Colleges (Madurai Zone) of Anna University, TN and funded by CUIC, Anna University with the support of M/s. Infosys at KLN College of Engineering, Madurai during 21-Feb-2018 and 22-Feb-2018. No. of participants: 1562.
17. Coordinator, Tamil Nadu State Level Placement Programme (TNSLPP 2018), participated by Students of Constituent Colleges (UCEs) of Anna University, TN and funded by CUIC, Anna University with the support of M/s Wipro at University College of Engineering, Nagercoil, TN during 27-Feb-2018 and 28-Feb-2018. No. of participants: 260.
18. Coordinator and Expert Member, Employability Skill Enhancement Programme (ESEP), participated by Students of Affiliated Engineering Colleges of Anna University, TN and funded by M/s Renault Nissan Technology Business Centre of India (RNTBCI), Chennai at Chennai and Coimbatore during 15-Feb-2019 and 26-Feb-2019. No. of participants: 960.
19. Coordinator and Expert Member, Employability Skill Enhancement Programme (ESEP), participated by Students of Affiliated Engineering Colleges of Anna University, TN and funded by M/s Renault Nissan Technology Business Centre of India (RNTBCI), Chennai at Madurai and Tirunelveli Zones during 04-Mar-2019 and 14-Mar-2019. No. of participants: 480.
20. Resource Person, Employability Skill Enhancement Programme (ESEP 2019), participated by Students of UCEs and Affiliated Engineering Colleges and funded by M/s. Renault Nissan at University College of Engineering, Villupuram during 31-Jul-2019 and 01-Aug-2019. No. of participants: 235.
21. Coordinator, Tamil Nadu State Level Placement Programme (TNSLPP 2019), participated by Students Studying in Chennai Zone Affiliated Engineering College Students of AU and funded by CUIC, AU with the support of M/s. CTS at Sri Sairam Engineering College, Chennai during 19-Oct-2019 and . No. of participants: 636.
22. Coordinator, Tamil Nadu State Level Placement Programme (TNSLPP 2019), participated by Students Studying in Coimbatore Zone Affiliated Engineering College Students of AU and funded by CUIC, AU with the support of M/s. Infosys at Sri Eshwar College of Engineering, Kinathukadavu, Coimbatore Dt. during 01-Nov-2019 and 02-Nov-2019. No. of participants: 2114.
23. Coordinator, WinMech 2019 A Sensitisation Program to School HSc Female Students, participated by Female Students Studying in HSc Nagappattinam Zone and funded by Renault Nissan Technology Business Centre India (RNTBCI) at EGS Pillay Engineering College, Nagappattinam, Tamil Nadu during 13-Nov-2019 and 14-Nov-2019. No. of participants: 1420.
24. Coordinator, Tamil Nadu State Level Placement Programme (TNSLPP 2019), participated by Students Studying in Chennai Zone Affiliated Engineering College Students of AU and funded by CUIC, AU with the support of M/s. IBM at Sri Sairam Engineering College, Chennai during 12-Dec-2019 and . No. of participants: 1220.

25. Coordinator, Tamil Nadu State Level Placement Programme (TNSLPP 2019), participated by Students studying in the Nagercoil Zone Engineering Colleges Affiliated to Anna University and funded by CUIC and Supported by Infosys at St Xaviers Catholic College of Engineering Nagercoil during 19-Dec-2019 and 20-Dec-2019. No. of participants: 1440.
26. Coordinator, Tamil Nadu State Level Placement Program (TNSLPP 2019), participated by Students studying in the Chennai Zone Affiliated Engineering Colleges and funded by CUIC, AU with the support of M/s. HCL at Sri Sairam Engineering College, West Tambaram, Chennai during 30-Jan-2020 and . No. of participants: 75.