Name of the Faculty	Dr.P. Duraipandy		7	
Designation	Associate Professor & Dean			
Bengination	(IQAC), HOD, EEE Dept.			
Date of Joining	12-06-2018			
E - Mail	duraipandy.eee@jbiet.edu.in			
L - IVIGII	hodeee@jbiet.edu.in	f		
	nodecesjoiet.edu.iii	BOOK OF THE PARTY OF THE PARTY OF		
Educational	Name of the Dogge	Inglibuto	Class	
	Name of the Degree	Institute	Class	
Qualifications Ph. D	Doctor of Dhilosophy (EEE)	Valandinana	Awarded	
rn. D	Doctor of Philosophy (EEE)	Kalasalingam University	Awarueu	
DC	M. E. (Darway Creatons	,	Einst	
PG	M. E (Power System	AKCE, TN	First	
LIC	Engineering)	KINGE	T' (
UG	B.E (Electrical & Electronics	KLNCE,	First	
	Engineering)	Madurai		
Work Experience				
Teaching	17.5 Years			
Research	10			
Industry	NIL			
Responsibilities	 Dean IQAC since May 2 	2024.		
held at the central	Dean Academics from J	July 2020 to Octobe	er 2020.	
level in college	 Dean Administration from May 2019 to till June 2020. Dean Academics from 02.07.2018 to April 2019. 			
	 Nodal Officer for NIRF 	Ranking 2018 & 20)19.	
	 Nodal Officer for ARIL 	A Ranking 2018 & 2	2019.	
	BOG Member during 20	018-19.		
	Academic Council Men	nber since AY 2018	- 19.	
Responsibilities	Head of the Department	since November 20	020.	
held at the	Chairman, Board of Stud	• Chairman, Board of Studies since November 2020.		
departmental level	Department NAAC and	Department NAAC and NBA Criterion Incharge.		
in college	1		O	
Courses Handled at	Basic Electrical & Electro	nics Engineering		
UG Level	Electrical Machines	0 0		
	Electromagnetic Theory			
	Measurements and Instru	umentation		
	Instrumentation			
	Power System Analysis			
	 Power System Operation 	and Control		
	Flexible AC Transmission			
	Principles of Management			
	Electrical Machines Labo Control and Instruments	•		
	Control and InstrumentaPower System Simulation	•		
	Power System Simulation	n Laporatory		
Course II and 1 ad at	ž .			
Courses Handled at	Computer Methods in Po	ower System analys	sis	
Courses Handled at PG Level	Computer Methods in PoFlexible AC Transmission	ower System analys	sis	
	 Computer Methods in Po Flexible AC Transmission HVDC & FACTS 	ower System analys	sis	
	Computer Methods in PoFlexible AC Transmission	ower System analys n Systems	sis	

	Advanced Power System Simulation Laboratory
	Power System Dynamics Laboratory
Area of Research	Power system voltage stability analysis, Smart Grid, FACTS,
	Evolutionary Algorithms and Artificial Neural Networks.
Research Guidance	Guided 10 M. Tech and 25 B. Tech Dissertations.
for M. Tech/ Ph. D	Guiding 1 Ph. D candidate
Students	8
Books/ Book	1. Extreme Learning Machine Approach for On-line Voltage
Chapters Published	Stability Assessment, Swarm, Evolutionary, and Memetic
•	Computing, Lecture Notes in Computer Science (LNCS)
	Springer Publications, Vol. 8298, 2013, pp. 397-405. ISSN:
	03029743, 2013.
	2. New cost effective inverter fed BLDC motor for electric
	vehicle applications, Applied Mechanics and Materials,
	Trans Tech Publications, Switzerland. Vol. 573, 2014, pp. 95-
	101. (ISSN: 1660-9336), 2014.
	3. Metaheuristic-Based Kernel Extreme Learning Machine
	Model for Disease Diagnosis in Industrial Internet of Things
	Sensor Networks, Artificial Intelligence Techniques in IoT
	Sensor Networks, CRC Press, 1st Edition, Chapter 6, (ISBN-
	10 : 0367439255), 2020.
	4. Flexible AC Transmission Systems, Scientific International
	Publishing House, 2022.
	e e e e e e e e e e e e e e e e e e e
	5. High Voltage Engineering Fundamentals, Notion Press, 2022.
	6. Neural network sliding mode control based on on-line
	identification for electric vehicle with ultracapacitor battery
	hybrid power, , ESN Publications, Volume 1, 2023.
	7. Performance Analysis of IPM and SPM-Based BLDC Motor
	Using JMAG Software, Lecture Notes in Electrical
	Engineering, Springer, Volume 2, 2024.
Prominent Research	International Conferences:
Publications in	
Conferences	1. P.Duraipandy and D.Devaraj, " Online Voltage Stability
	Assessment using least Square SVM with reduced input
	features, 2014 IEEE International Conference on Control
	Instrumentation Communication and Computational Technologies,
	ICCICCT 2014, IEEE Publisher, Noorul Islam University,
	Thuckalay, 10 th & 11 th July 2014, pp. 1070 - 1074. (Best Paper
	Award) DOI: 10.1109/ICCICCT.2014.6993119 Published in
	<i>IEEE Xplore (Scopus Indexed)</i>2. P.Duraipandy and D.Devaraj, "Development of Extreme
	Learning Machine for Online Voltage Stability Assessment
	Incorporating Wind Energy Conversion System", 2017 IEEE
	International Conference on Intelligent Techniques in Control,
	Optimization and Signal Processing (INCOS'17), IEEE Student
	Branch, Kalasalingam University, 23rd - 25th, March 2017, pp.
	1 - 7. DOI: <u>10.1109/ITCOSP.2017.8303158</u> Published in IEEE
	Xplore (Scopus Indexed)
	3. P.Duraipandy and D.Devaraj, "On Line Voltage Stability
	Monitoring using ANN with Dimensionality Reduction
	Techniques" Proceedings of International Conference on Power

- System Analysis, Control and Optimization, PSACO'08, Andhra University, Andhra Pradesh, 13-15, Mar 2008, pp. 878-885.
- 4. P.Duraipandy and D.Devaraj, "Artificial Neural Network Approach for On-Line Voltage Stability Assessment with Reduced Input Feature set", Proceedings of International Conference on Power, Control and Embedded Systems, ICPCES 2010, Anna University, Chennai, Dec 8-10, 2010, pp. 79-86.
- 5. J.Karthikeyan, P.Duraipandy and R.Dhanasekaran, "Cuk converter based CSI fed BLDC motor for defense applications", *Proceedings of International Conference on Recent Advances and Challenegs in Energy* held at Manipal University, Manipal, Jan. 2012, pp.656-661.
- 6. P.Duraipandy and D.Devaraj, "Extreme Learning Machine Approach for On-line Voltage Stability Assessment", Proceedings of 4th Joint International Conference on Swarm, Evolutionary and Memetic Computing (SEMCCO-2013) & Fuzzy and Neural Computing (FANCCO-2013), SRM University, Chennai, 19th to 21st December, 2013. (Published in Lecture Notes in Computer Science (LNCS) 8298, 2013, pp. 397-405). ISSN:03029743
- 7. K.Sneha and P.Duraipandy, "Steady State Voltage Stability Enhancement using STATCOM," Proceedings of International Conference on Power and Energy Systems, ICPES'13, VCET, Madurai, 19th to 21st December, 2013.
- 8. K.Arunkumar and P.Duraipandy, "Power Oscillation Damping In Doubly Fed Induction Generator Based Wind Energy Conversion System", Proceedings of International Conference on Emerging Trends in Engineering & Technology, ICETET'15, Pandian Saraswathi Yadav Engineering College, Arasanoor, Sivagangai, 13th & 14th March, 2015, Page 168.
- **9.** P.Duraipandy, M.Ramanathan, R.Sathish Kumar and T.Prahatheesh, "Energy Audit and Management", *International Conference on Power and Energy System (ICPES '17)*, organized by EEE Department, Velammal College of Engineering and Technology, during 21st to 22nd, April 2017.
- 10. K Janani Veerapandi, K.S Lavanya Thangam, B Gayathri and P Duraipandy, "Optimal Location of Unified Power Flow Controller for Voltage Stability Enhancement Using PSO Algorithm", Recent trends in Electrical, Electronics and Communication Engineering (REECE) during March 16th 18th, 2017 at P.S.R. Engineering College (PSREC), Sivakasi.
- 11. P.Duraipandy and R.Narmatha Banu, "Optimal Location of Phasor Measurement Unit Using ANT Colony Algorithm Under Contingency" *AICTE sponsored International Conference on Power and Energy Systems (ICPES'17)*, Organized by Dept. of EEE, Velammal College of Engineering and Technology, Madurai during 21st & 22nd December 2017.
- 12. P.Duraipandy and A.Om Prakash, "Post-Contingency Loading Margin Estimation using Continuation Power Flow Technique" *AICTE sponsored International Conference on Power and Energy Systems (ICPES'17)*, Organized by Dept. of EEE, Velammal College of Engineering and Technology, Madurai during 21st & 22nd December 2017.
- 13. P.Duraipandy, R.J.Venkatesh and K.Sneha, "Power System Loading Margin Enhancement Using Static Synchronous Series Compensator" AICTE sponsored International Conference on

- Power and Energy Systems (ICPES'17), Organized by Dept. of EEE, Velammal College of Engineering and Technology, Madurai during 21st & 22nd December 2017.
- 14. P.Duraipandy, T.Chandrasekar and K.Sneha, "Power System Loading Margin Enhancement Using Unified Power Flow Controller" *AICTE sponsored International Conference on Power and Energy Systems (ICPES'17)*, Organized by Dept. of EEE, Velammal College of Engineering and Technology, Madurai during 21st & 22nd December 2017.
- 15. Dr.P.Duraipandy, Dr.D.Devaraj and Dr.R.Narmatha Banu, "Extreme Learning Machine Approach for on Line Voltage Stability Monitoring in Smart Grid System" AICTE sponsored International Conference on Power and Energy Systems (ICPES'17), Organized by Dept. of EEE, Velammal College of Engineering and Technology, Madurai during 21st & 22nd December 2017.
- 16. I.S.Hephzi Punithavathi, P. Ganesh Kumar and P.Duraipandy, "Detection of Diabetic Retinopathy Based on Exudates using Extreme Learning Machine" *AICTE sponsored International Conference on Power and Energy Systems (ICPES'17)*, Organized by Dept. of EEE, Velammal College of Engineering and Technology, Madurai during 21st & 22nd December 2017.
- 17. Dr.P.Duraipandy, R.Abinaya, A.Apshana and G.Divya, "IoT Based industrial Automation Using Arduino", 5th International Conference On Emerging Trends In Engineering & Technology'18 (ICETET'18), Organized by Pandian Saraswathi Yadav Engineering College, Arasanoor, Madurai during 9th & 10th March 2018.
- 18. Dr. S. Saravanan, Dr. P. Duraipandy & Dr. K. Karunanithi, "OPTIMAL LOCATION OF PHASOR MEASUREMENT UNIT USING ANT COLONY OPTIMIZATION UNDER CONTINGENCY" International Conference on Energy Efficient Technologies for Sustainability (ICEETS'18), held on 5th 7th April, 2018, St.Xavier's Catholic College of Engineering Chunkankadai. (Published in SSRN digital library under ELSEVIER).
- 19. Dr. K. Karunanithi, Dr. S. Saravanan and Dr. P. Duraipandy, "Reliability and Environmental Pollution Analysis of an Indian Power Sector in 2016" *RAPIDEET-2018, 2nd Annual National conference* organized by B. V. Raju Institute of Technology, Narsapur, Medak, Telangana, during 20th and 21st April 2018.
- 20. I.S. Hephzi Punithavathi, P.GaneshKumar and P.Duraipandy, "Annotation and Retrieval of Retinal Images using Support Vector Machine with Active Learning", 2019 IEEE International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS '19), organized by IEEE Student Branch, Kalasalingam University, during 11th 13th, April 2019. (Available in IEEE Xplore) Scopus Indexed
- 21. Salauddin Mohammad, K. Snehalatha, P.Duraipandy and Towheed sulthana, "Design and Implementation of Reconfigurable Polyphase Filter Bank Receiver on Artix-7 FPGA" 2019 IEEE International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS '19), organized by IEEE Student Branch, Kalasalingam University, during 11th -13th, April 2019. (Available in IEEE Xplore) Scopus Indexed.
- 22. L.Jyothi and P.Duraipandy, "Automatic Power Control and

- Management between Standalone DC Microgrids using FLC", International Conference on "Recent Innovations in Smart Grid and Renewable Energy (RSGRE-2020) organized by Department of EEE, J. B. Institute of Engineering and Technology, Hyderabad, on 9th & 10th January 2020.
- 23. A. Sweatha, B. Baskaran and P. Duraipandy, "An Extensive Review of DC-DC Converter Topologies for Water-Pumping Application," 2022 International Conference on Innovations in Science and Technology for Sustainable Development (ICISTSD), Kollam, India, 2022, pp. 151-156, doi: 10.1109/ICISTSD55159.2022.10010591. (Available in IEEE Xplore) Scopus Indexed.
- **24.** G. S. Rao, P. Duraipandy, K. Mathan, B. Gopi and J. Manikandan, "Wind Energy System using Boost Converter with Three Phase Inverter," 2022 Sixth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Dharan, Nepal, 2022, pp. 860-863, doi: 10.1109/I-SMAC55078.2022.9987384. (Available in IEEE Xplore) Scopus Indexed.
- 25. S. Balasubramaniyan, P. Duraipandy, N. Kalyani, P. Shanmugaraja, D. Shobana and M. Vimala, "Comparison of Recurrent Neural Network Model for Future Electric Power Prediction," 2022 Sixth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Dharan, Nepal, 2022, pp. 728-733, doi: 10.1109/I-SMAC55078.2022.9986504. (Available in IEEE Xplore) Scopus Indexed.
- 26. P. Duraipandy, A. Sharath Kumar, S. M. Yousuf, B. Sakthivel, T. Shanmugapriya and K. R. Kumar, "Advanced Deep learning-based Controller for Robust EV Speed Management," 2022 Sixth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Dharan, Nepal, 2022, pp. 598-602, doi: 10.1109/I-SMAC55078.2022.9987334. (Available in IEEE Xplore) Scopus Indexed.
- 27. R. Raja, G. Srinivasa Rao, P. Duraipandy et al., "Wind energy system based bidirectional converter with energy storage system" AIP Conference Proceedings 2523, 020062 (2023); https://doi.org/10.1063/5.0121762 Published Online: 30 January 2023.

National Conferences:

- 1. D.Devaraj and P.Duraipandy, "Modeling and simulation of SVC and UPFC", Proceedings of the National seminar on Power Electronics Applications in Power Systems FACTS 2005, AKCE, 30-31st Dec-05, pp. 111-119.
- 2. P.Duraipandy and D.Devaraj, "A Real time Power System Voltage Stability Evaluation using ANN" National Conference on Emerging Technologies in Electrical systems ETES 2006, NICE, Jan-2006, pp.137-143.
- 3. P.Duraipandy and D.Devaraj, "On Line Voltage Stability Monitoring using ANN", Proceedings of the National seminar on Voltage Stability in Power Systems, SVC 2006, AKCE, 13-14th Oct-06, pp. 1-7.
- 4. P.Duraipandy and D.Devaraj, "Radial Basis Function Neural Network for On-Line Voltage Stability Assessment" CSIR &

- DRDO sponsored Third National conference on Power and Energy Systems, NPES, 18th & 19th March, 2011, Kalasalingam University.
- 5. P.Duraipandy and D.Devaraj "Steady State Voltage Stability Assessment using Continuation Power Flow" in the IEEE sponsored Second National conference on Intelligent Techniques in Control Optimization and Signal Processing conducted on 1st and 2nd April, 2011 held at Kalasalingam University.
- P.Duraipandy, "Static Voltage Stability Margin Enhancement Using Static VAR Compensator" Proceedings of IEEE sponsored National Conference on Power, Energy and Intelligent Systems, 28th March, 2012, Sudharsan Engineering College, pp.152-156.
- P.Duraipandy and D.Devaraj, "Artificial Neural Network Model for Large Scale Power System Voltage Stability Assessment with Reduced Input Feature Set", Proceedings of fourth National Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'13, Kalasalingam University, Krishnankoil, April 11, 2013, pp 82-88.
- 8. P.Duraipandy and D.Devaraj, "Support Vector Machine Approach for On-line Voltage Stability Assessment", Proceedings of Fourth National Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'13, Kalasalingam University, Krishnankoil, April 11, 2013, pp 111-116.
- 9. N.Ramdass and P.Duraipandy, "PMSG-based Wind Energy Conversion System," Proceedings of the TEQIP II sponsored Eighth National Conference on Power Electronics and Drives, PEDC'14, ACCET, Karaikudi, 12th March, 2014.
- N.Ramdass and P.Duraipandy, "Modeling and Simulation of PMSG based WECS with SEPIC Converter," Proceedings of Fifth National Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'14, Kalasalingam University, Krishnankoil, 28, 29th March 2014, pp 164-169.
- 11. K.Sneha and P.Duraipandy, "Comparison of SVC and STATCOM in Voltage Stability Enhancement," Proceedings of Fifth National Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'14, Kalasalingam University, Krishnankoil, 28, 29th March 2014, pp 185-190.
- **12.** P.Duraipandy and R.M.Ramagiri, "Fuzzy Logic Controller based Static VAR Compensator for Power System Small Signal Stability," Proceedings of Fifth National Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'14, Kalasalingam University, Krishnankoil, 28, 29th March 2014, pp 205-210. (Best Paper Award)
- 13. Janaki M, Harini S, Hemaroopini P and Duraipandy P, "A Multi Source Single Control (MSSC) For Domestic Distribution Systems", Proceedings of Sixth National Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'15, Kalasalingam University, Krishnankoil, 26, 27th March 2015, pp 192-195.
- 14. P.Duraipandy and C.Ishwarya, "Post Contingency Loading Margin Estimation for Load Shedding using Continuation Power Flow method", Proceedings of Sixth National

- Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'15, Kalasalingam University, Krishnankoil, 26, 27th March 2015, pp 167-173.
- **15.** K.Arunkumar and P.Duraipandy, "Power Oscillation Damping In Doubly Fed Induction Generator Based Wind Energy Conversion System", Proceedings of Sixth National Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'15, Kalasalingam University, Krishnankoil, 26, 27th March 2015, pp 161-166.
- 16. Sopitha Meena.I Subathra.V Vishnupriya.J and Duraipandy.P, "Load Sharing Based on Priority Task Using Zigbee", Proceedings of Sixth National Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'15, Kalasalingam University, Krishnankoil, 26th & 27th March 2015, pp.173-174.
- **17.** P.Duraipandy and S.Sangamithra, "Optimal Allocation of Phasor Measurement Unit Using Ant Colony Algorithm", National Conference on Power and Renewable Energy Systems NCPRES '16, 29th –30th JANUARY 2016 at VCET, Madurai.

Prominent Research Publications in Journals

SCI and Scopus Indexed Publications:

- P.Duraipandy and D.Devaraj, "Extreme Learning Machine Approach for Real Time Voltage Stability Monitoring in a Smart Grid System using Synchronized Phasor Measurements", Journal of Electrical Engineering & Technology (JEET), 11 (6) (2016), 1527-1534. (Thomson Reuters - Science Citation Indexed Journal (IF: 0.679 - 2015) and Scopus Indexed)
- 2. S. Muthukaruppasamy, A. Abudhahir, A. Gnana Saravanan, J. Gnanavadivel and P. Duraipandy, "Design and Implementation of PIC/FLC plus SMC for Positive Output Elementary Super Lift Luo Converter working in Discontinuous Conduction Mode" Journal of Electrical Engineering & Technology (JEET), Volume 13, Issue 5, 2018, pp. 1886-1900. http://doi.org/10.5370/JEET.2018.13.5.1886 (Thomson Reuters Science Citation Indexed Journal (IF: 0.679 2015) and Scopus Indexed)
- K. V. Praveen, P. M. Joe Prathap, S. Dhanasekaran, I. S. Hephzi Punithavathi, P. Duraipandy, Irina V. Pustokhina, and Denis A. Pustokhin, "Deep Learning Based Intelligent and Sustainable Smart Healthcare Application in Cloud-Centric IoT", Computers, Materials & Continua, Vol. 66, No.2, PP. 1987–2003, 2021. doi:10.32604/cmc.2020.012398 (Thomson Reuters Science Citation Indexed Journal and Scopus Indexed) SCI: 2020 Impact Factor 3.772

- 4. Hephzi Punithavathi, Dhanasekaran S, Duraipandy P, Laxmi Lydia E, Sivaram M and K. Shankar, "Optimal Dense Convolutional Network Model for Image Classification in Unmanned Aerial Vehicles based Adhoc Networks", International Journal of Ad Hoc and Ubiquitous Computing, Vol. 39, No. 1/2, pp. 46-57, Feb. 2022 (Thomson Reuters Science Citation Indexed Expanded Journal and Scopus Indexed) Impact Factor 0.654 (2021) doi:10.1504/IJAHUC.2022.120944
- K. Pradeep Mohan Kumar, S. Dhanasekaran, I. S. Hephzi Punithavathi, P. Duraipandy, A. Kumar Dutta et al., "Bird swarm algorithm with fuzzy min-max neural network for financial crisis prediction," Computers, Materials & Continua, vol. 73, no.1, pp. 1541–1555, 2022. (Thomson Reuters – Science Citation Indexed Journal and Scopus Indexed)
- 6. Vaiyapuri, T.; Dutta, A.K.; Punithavathi, I.S.H.; Duraipandy, P.; Alotaibi, S.S.; Alsolai, H.; Mohamed, A.; Mahgoub, H. Intelligent Deep-Learning-Enabled Decision-Making Medical System for Pancreatic Tumor Classification on CT Images. Healthcare 2022, 10, 677. https://doi.org/10.3390/ healthcare10040677 (Thomson Reuters Science Citation Indexed Journal and Scopus Indexed)
- 7. J. Femila Roseline, D. Dhanya, Saravana Selvan, M. Yuvaraj, P. Duraipandy, et al., "Neural Network modelling for prediction of energy in hybrid renewable energy systems" Energy Reports Elsevier, Volume 8, Supplement 8, November 2022, Pages 999-1008.
- 8. P. Duraipandy, D.M.S Zekrifa et al., "Optimized Controller Design for Renewable Energy Systems by using Deep Reinforcement Learning Technique" International Journal of Renewable Energy Research, Vol.14, No.1, March 2024.

Scopus Indexed Publications:

- I.S.Hephzi Punithavathi, P.Ganeshkumar and P.Duraipandy, "Intensive Detection of Diabetic Retinopathy Stages by Integrated Active Learning based SVM", Sensor Letters, American Scientific Publisher, Volume 16, Number 5, May 2018, pp. 356-367(12).
- Dr. K. Karunanithi, Dr. S. Saravanan, Dr. P. Duraipandy, "Reliability and Environmental Pollution Analysis of an Indian Power Sector in 2016" International Journal of Pure and Applied

- Mathematics (IJPAM), Volume 118, No. 24, 2018.
- 3. Nandha Gopal J, S. Muthukaruppasamy, K. Rajeswari, P.Duraipandy and Priya N, "A PMSG based Flexible Input WECS for Grid using Power Converter and MFT Device" International Journal of Test Engineering and Management, Volume 82,Page No. 4638 - 4644, January 2020.
- 4. Dr.S.Saravanan, Dr.K.Karunanithi and **Dr.P.Duraipandy** "Application of Differential Evolution Algorithm to Substation Expansion Planning", **Journal of Critical Reviews**, Volume 7, Issue 14, **August 2020**, Page No. 2614-2621.
- 5. Dr.Naveen Kumar and Dr.P.Duraipandy, "K-Means Clustering Analysis For Election Prediction Using Python" Journal of Critical Reviews, Volume 7, Issue 10, May 2020, Page No. 2696-2701. Dr. S. Muthukaruppasamy and Dr.P.Duraipandy, "Load Transient Stability Analysis of DC-DC Converter using Two Loop Control Structure", Solid State Technology, Volume: 64, Issue: 2, 2021, Page No. 120-130.
- M. Pushpalatha and Dr. P. Duraipandy, "Stability analysis for Grid-Connected Single Phase Asymmetrical Cascaded Multilevel Inverter with SRF Fuzzy Control with Improved Power Quality Feratures" Design Engineering, Issue 1, Pages 3312-3322, 2022.
- 7. **Dr.P.Duraipandy**, Dr.Towheed Sultana, Mr.Rajkumar D Bhure, Dr.J.Kartigeyan and Dr.G.Nithya, "Designing and Implementation of Embedded Based Alert System For Overheat Detection In Machines" Journal of Pharmaceutical Negative Results, Volume 14, Issue 2, 2023, Page No. 825 832.
- 8. A Swetha, Balasubramanian and P. Duraipandy, "A Novel Voltage Lifting Technique of Switched inductor cell based modified LUO converter topology for water pumping system" International Journal of Applied Power Engineering, Vol. 12, Issue 4, pp. 416-428, December. 2023, pp.416-428.
- S. Muthukaruppasamy, E. Parimalasundar, V. Rajagopal and P. Duraipandy, "Integrating MPPT and ANN for Efficient DC-DC and Dc-AC Conversion in Photovoltaic Applications, SSRG international Journal of Electrical and Electronics Engineering, Vol.10, Issue 8, pp.51-61, August 2023.
- 10. S. Muthukaruppasamy, P. Geetha, V. Rajagopal and P.

Duraipandy, "Modeling of Energy Generation Using Piezoelectric Material for Wearable Devices", SSRG international Journal of Electrical and Electronics Engineering, Vol.10, Issue 9, pp.102-111, Sep. 2023.

UGC Care /other Peer-Reviewed Journals:

- J.Kartigeyan, G.Nithya and P.Duraipandy, "Modeling of Switched Reluctance Motor using Soft Magnetic Composites, International Journal of Research and Analytical Reviews (IJRAR), May 2019, Volume 6, Issue 2, pp. 21-29. (E-ISSN 2348-1269, P-ISSN 2349-5138) (UGC Approved)
- R. Swadishna, P. Manisha, M. Padmapriya, P. Duraipandy and Dr. J. Kartigeyan, "Miniature Thermal Power Plant Using Tep Transducer For Domestic And Industrial Applications" Journal of Emerging Technologies and Innovative Research, Volume 6 Issue 5, May-2019, UGC Approved & Impact Factor 5.87. (ISSN: 2349-5162)
- 3. N. Sai Teja, P. Yeshaswi, P.Pravan Kumar Reddy and P.Duraipandy, "Electric Spring for Voltage and Power Stability and Power Factor Correction using P+R Controller" Journal of Interdisciplinary Cycle Research (ISSN: 0022-1945), Vol. 12, Issue 3, March 2020, pp. 103 110. (UGC Approved)
- 4. L.Jyothi and P.Duraipandy, "Automatic Power Control and Management between Standalone DC Microgrids using FLC", International Journal of Emerging Technology and Innovative Research (JETIR), Volume 7, Issue 2, March 2020, Page No. 56 – 62. ISSN - 2349-5162 (UGC Approved)
- Karli Jayachand, Bobbili Lasya Priya, Kunusoth Sai Kiran, Jangidi Rakesh, Dr. P. Duraipandy, "Modelling and Simulation of PV Charging Station with Improved Power Quality Features", International Research Journal of Modernization in Engineering Technology and Science, Volume:04, Issue:06, June-2022,Page No. 1216 -1227. e-ISSN: 2582-5208 (UGC Approved)
- A. Abhishek Reddy and P. Duraipandy, "Design of PV Connected Multilevel Inverters based on Switched Capacitors for Electric Vehicle Applications", Indian Journal of Technical Education, Vol. 11, issue 2, August 2023.

	 P. Duraipandy, etal., "Implementation of Solar PV Array Based Multifunctional EV Charger Using Fuzzy Logic Controller",
	International Journal of System Design and Information Processing
	(SDIP), Volume -11, Issue-3, March 2023.
	8. P. Duraipandy, etal., "ELECTRIC VEHICLE CHARGING
	STATION USING GRID-CONNECTED HYBRID SYSTEM",
	International Journal of System Design and Information Processing
	(SDIP), Volume -11, Issue-3, March 2023.
	9. ANURAG KOMIRI and P. Duraipandy "FLC FOR ELECTRIC
	VEHICLE APPLICATIONS IN POWER OPTIMISATION
	SCHEME OF INDUCTION MOTOR" Journal of Engineering
	Sciences, Vol 14 Issue 03, pp. 202 to 214, 2023.
Orcid ID	0000-0003-2146-3509
Scopus ID	56021699100
Coogle Scholer ID	https://scholar.google.com/citations?user=dAxQiv8AAAAJ&hl=en
Google Scholar ID	https://scholar.google.com/chations/user-dAxQivoAAAAJ&ii-eii
II Inday (As not	7
H-Index (As per SCOPUS Database)	,
PROFESSIONAL	Life Member of International Association of Engineers [IAENG]
MEMBERSHIPS	Life Member of Indian Society for Technical Education [ISTE]
Details of Short-	1. Workshops Attended:
Term Training	1 Danticipated in the one day would be approximated in the one day would be approxima
Programs/Faculty Development	1. Participated in the one day workshop programme on "Artificial Neural Networks and Applications" held at AKCE, 21st August 2004.
Programs/Seminars/	2. Participated in the one day workshop programme on "Genetic
Workshops	Algorithms for Engineering Optimization" held at AKCE on 11th March 2005.
(Attended)	3. Participated in the one day workshop programme on "Evolutionary
	Computation Techniques" held at AKCE on 22nd October 2005. 4. Undergone the training program covering, "SCADA
	WONDERWARE INTOUCH" held from 25.03.06 to 26.03.06 by
	prolific systems & Technologies PVT.LTD. in AKCE- Krishnankoil.
	5. Participated in the National Level workshop on Computational analysis in Power systems held at St.Joseph College of engineering,
	Jeppiar Nagar, Chennai on 12.08.08.
	6. Participated in the Research Scholars' Meet on "Soft Computing
	Techniques-A Research Perspective" at Jaya Engineering College, Thiruninravur, Chennai during 04.04.08 & 05.04.08
	7. Participated in the National Seminar on "Research and Consultancy
	Services" held at Kalasalingam University on 30th December 2011.
	8. Participated in the International Level workshop on "Recent Developments in Neural Networks" held at Madras Institute of
	Technology, Anna University, Chennai during 3-5, October, 2012.
	9. Participated in the One day Workshop on "Multi Objective

- Optimization using Evolutionary Algorithm" held at Kalasalingam University on 2nd February 2013.
- 10. Participated in the One day Workshop on "IoT using arduino" on 5th October, 2018 conducted by Pantech ProEd Pvt. Ltd held at JBIET, Hyderbad, Telangana.
- 11. Participated one day Workshop on "BRIDGE 2018 Fostering India for Industry 4.0" on 24th October 2018 at ICT ACADEMY at MariGold Hotel, Hyderabad, Telangana.
- 12. Participated in the Six days Workshop on "Industrial Automation" organized by the department of Electrical and Electronics Engineering in collaboration with Electromation Technologies during 18th -23rd February 2019 at J.B.Institute of Engineering and Technology, Hyderabad, Telangana.
- 13. Participated in One Day Workshop on "Significance of MATLAB in Applications of Emerging Technologies" on 26th June 2019 at CBIT, Hyderabad, Telangana.
- 14. Participated in Two Day Workshop on "Quality Enhancement Measures in Higher, Technical, Professional and Management Educational Institutions with special focus on NIRF India Rankings 2020" on 18th & 19th October 2019 at JNTUH, Hyderabad, Telangana.
- 15. Participated in Two Day Workshop on "Recent Trends in Electrical Engineering" on 23rd and 24th December 2019 organized by Department of Electrical and Electronics Engineering, J.B.Institute of Engineering and Technology, Hyderabad, Telangana.
- 16. Successfully completed Training on "IPR & Technology Transfer" conducted as part of IIC Innovation Ambassador Training Series organized by Institution's Innovation Council of MHRD's Innovation Cell, AICTE held at MLRIT, Hyderabad, Telangana on 6th & 7th February 2020.
- 17. Participated in Two Day Online Workshop on "Online Tools & Software for Remote Teaching-Learning" scheduled during 24th & 25th of April, 2020 organized by UGC-Human Resource Development Centre JNTUH.
- 18. Participated in "International Webinar on Research Methodology" on 28th April to 1st May 2020 organized by AISSMS College of HMCT, Pune.
- 19. Participated in Live Online Certificate Webinar on "OBE & NBA Accreditation Conducted" on 22nd April 2020organized by Start Core Technologies, Hyderabad.
- 20. Participated in online workshops on "Intellectual Property Rights" conducted on 10th& 11th April 2020 organized by PanditDeendayal Petroleum University (PDPU) and Intellectual Property Protection Organization (IPPO).
- 21. Participated in Live Online Certificate Programme on "Intellectual Property Rights and Patenting" on 8th April 2020 organized by Start Core Technologies, Hyderabad.
- 22. Participated in Live Online Certificate Webinar on "Technical Paper Writing and Publishing in Reputed Journals" on 18th April 2020 organized by Start Core Technologies, Hyderabad.
- 23. Participated in Online Webinar on "Virtual Labs for Science and Engineering"Organized by IEEE Guntur Subsection in Association with Hyderabad Section IEEE Education Society Chapter on 22ndApril 2020 from IST 04:00 pm to 05:00 pm.
- 24. Participated in Webinar on "Permanent Magnet Machines for Industrial and Strategic Applications" on 26th April 2020 organized

- by IEEE CBIT SB, Hyderabad.
- 25. Participated in Online Demo on "Accreditation Management System" on 21st April 2020 organized by Inpods Ed-Tech.
- 26. Participated in the National Webinar on "Capacity Building on NBA Criteria 1 to 10" presented by Prof. J. R. Sharma and Dr.Ajay Aggarwal on 27.06.2020 organized by Aggarwal Educational Solutions.
- 27. Participated in the Technical Webinar Series on 26th and 27th June 2020 organized by Department of EEE, SRM Institute of Science and Technology, Chennai, Tamilnadu.

2. Faculty Development Programmes Attended:

- 1. Participated in the FDP on Power System operation & Control held at Arulmigu Kalasalingam College of Engineering, Krishnankoil during 15.05.2006 to 27.05.2006.
- 2. Participated in the FDP on Power System Analysis held at College of Engineering, Anna University, Guindy during 03.12.2007 to 15.12.2008.
- 3. Participated in the FPD on "Software Tools for Simulation and Analysis of Power System" organized by IEEE Madras section at Kalasalingam University during 3rd 4th October 2009.
- 4. Participated in the FDP on "Neural Network and Fuzzy Logic Control" organized by EEE Dept. of National College of Engineering at Tirunelveli during 20.11.2009 to 21.11.2009.
- 5. Participated in the FDP on "Research Issues in Electrical Engineering " organized by EEE Dept. of Velammal College of Engineering & Technology at Madurai on 10th & 11th March 2011.
- 6. Participated in the FDP on "Corporate Communication and Organizational Dynamics" organized by Training and Placement Cell of Velammal College of Engineering & Technology at Madurai during 14th & 15th November 2011.
- 7. Participated in the FDP on "Mathematical Methods for Electrical Engineers" organized by EEE Dept. of Velammal College of Engineering & Technology at Madurai on 1st October 2011.
- 8. Participated in the FDP on "Team Building and Leadership Skills" organized by Training and Placement Cell of Velammal College of Engineering & Technology at Madurai on 4th February 2012.
- 9. Participated in the FDP on "Issues in Restructured Electrical Power Market" organized by EEE Dept. of Velammal College of Engineering & Technology at Madurai on 18th February 2012.
- 10. Participated in the FDP on "Entrepreneurship Development" organized sponsored by Entrepreneurship Development Institute, Ahmadabad at Velammal College of Engineering & Technology at Madurai during 16.04.2012 to 27.04.12.
- 11. Participated in the FDP on "Advanced Technologies in Distributed Generation Systems and Microgrids" organized by EEE Dept. of Velammal College of Engineering & Technology at Madurai on 21st April 2012.
- 12. Participated in the FDP on "Research Methodologies" organized by EEE Dept. of Velammal College of Engineering & Technology at Madurai from 12.03.13 to 14.03.13.
- 13. Participated in the FDP on "Power Electronics Applications in Solar and Wind Energy using MATLAB" organized by EEE Dept. of K.L.N. College of Engineering at Madurai on 4th October 2013.

- 14. Participated in the FDP on "Design and Development of FACTS Controller" organized by EEE Dept. of Thiagarajar College of Engineering at Madurai on 31.01.2014 and 01.02.2014.
- 15. Participated in the FDP on "MATLAB Applications for Research Engineering Problems" organized by EEE Dept. of Velammal College of Engineering & Technology at Madurai on 08-09, October 2014.
- 16. Participated in the FDP on "Software Tools for Simulation and Analysis of Electric System" organized by IEEE Madras section at Kalasalingam University during 18th 20th December 2014.
- 17. Participated in the FDP on "Computational Intelligent Techniques & their Applications" organized by Dept. of EEE and ECE at Kalasalingam University during 8th 12th September 2015.
- 18. Participated in the FDP on "NBA Accreditation Process" organized by EEE Dept. of Velammal College of Engineering & Technology at Madurai on 03-04, February 2017.
- 19. Participated in the Training Programme on "Internet of Things and smart Grid" organized by IEEE Student Branch at Kalasalingam University during 18th 20th May 2017.
- 20. Participated in the 3 day FDP on "Power System Analysis" conducted by EEE Dept. at Kamaraj College of Engineering and Technology, during 7th 9th June 2017.
- 21. Participated Faculty Development Program on "PEDAGOGICAL TECHNIQUES FOR EFFECTIVE TEACHING" during 4th to 6th July 2019 at J.B.Institute of Engineering and Technology, Hyderabad, Telangana.
- 22. Participated Faculty Development Program on "Machine Learning with Python" during 5th to 9th August 2019 organized by CSE Department, J.B.Institute of Engineering and Technology, Hyderabad, Telangana.
- 23. Participated Faculty Development Program on "CHANGING DIMESIONS I MARKETING SCENARIO" 9th August 2019 organized by MBA Department, J.B.Institute of Engineering and Technology, Hyderabad, Telangana.
- 24. Participated Faculty Development Program on "Emerging Trends in Power and Energy: A Research Perspective" during 7th to 13th August 2019 organized by EEE Department, J.B.Institute of Engineering and Technology, Hyderabad, Telangana.
- 25. Participated in National Level Faculty Development Programme on "Effective Teaching and Research Skills" from 5th to 11th November 2019 organized by Dept. of EEE, J.B.Institute of Engineering and Technology, Hyderabad, Telangana.
- 26. Participated one Week FDP on "Pedagogical Research, Technical Writing and Publication" from 1st to 7th August 2019 organized by ECE Department, J.B.Institute of Engineering and Technology, Hyderabad, Telangana.
- 27. Participated in "An Online Faculty Development Programme on Research Opportunities in Power Engineering (ROPE 2020)" during 22nd to 27th April 2020 Organized by the Department of Electrical and Electronics Engineering, CMR College of Engineering and Technology, Hyderabad.
- 28. Successfully completed "5 Days Online Faculty Development Program (FDP) on R Programming" organized by Indo Global Group of Colleges, New Chandigarh in association with IIT Bombay Spoken Tutorial (An initiative of National Mission on Education through ICT, MHRD, Govt. of India) from 27thApril to 1st May 2020.

- 29. Participated in One Day National Level FDP on "Outcome Based Education" on 29.04.2020 organized by Internal Quality Assurance Cell, Government First Grade College, Bengaluru in association with inpods Ed-Tech.
- 30. Successfully completed "5 Days Online Faculty Development Program (FDP) on R Programming" organized by Indo Global Group of Colleges, New Chandigarh in association with IIT Bombay Spoken Tutorial (An initiative of National Mission on Education through ICT, MHRD, Govt. of India) from 27thApril to 1st May 2020.
- 31. Participated in One Week Online Faculty Development Program on "Research Challenges and Opportunities Post COVID-19 (RECOP-2020)" during 4th to 9th May 2020 organized by Research and Development Cell and IIC of Sri Vasavi College of Engineering College (Autonomous), Hyderabad.
- 32. Participated in Online Faculty Development Program on "Electric Vehicle Technology" during6th to 9th May 2020 organized by IEEE Madras Section, Chennai, Tamilnadu.
- 33. Participated in Online Faculty Development Program on "IPR Awareness" on13th May 2020 organized by Keyway Research, Hyderabad.
- 34. Participated in online Faculty Training on "Project Proposal Writing" on 25th& 26th May 2020 organized by Faculty Affairs and Centre for Learning Technology, Kalasalingam Academy of Research and Education, Krishnankoil, Tamilnadu.
- 35. Participated in Faculty Development Program on "Power Electronic Converters for Renewable Energy Systems" during 27th May to 2nd June 2020 organized by Department of EEE, Kalasalingam Academy of Research and Education, Krishnankoil, Tamilnadu.
- 36. Participated in Faculty Development Program on "Power Electronic Converters for Renewable Energy Systems" during 27th May to 2nd June 2020 organized by Department of EEE, Kalasalingam Academy of Research and Education, Krishnankoil, Tamilnadu.
- 37. Participated in three day FDP on "Emerging Research Opportunities in Electrical Engineering" during 11th June 2020 to 13th June 2020 organized by Department of EEE, JBIET, Hyderabad.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/ Workshops (Organized)

Sr.No	Title	Date
1.	"Intensive Teaching Workshop (ITW)-2022"	29-08-2022 to
	8 1 ()	09-08-2022
2.	Online Webinar on "How to Become a Good	28th July
۷.	Entrepreneur"	2022.
3.	"POWER CLEVER QUIZ"	3rd March
3.	Quiz Competition.	2023.
	One day Workshop on "Power Train in	18th March
4.	Electric Vehicle on.	
		2023
E	Project Contest	23 rd March
5.		2023
	Paper Presentation	23rd March
6.	-	2023
7	Poster Presentation	23rd March
7.		2023
0	Increase of Children Association	20th June
8.	Inauguration of Students Association	2023

9.	Two Day Workshop on "Industrial Automation" on	10 th & 11 th July 2023
10.	Industry Visit to DRDL, Hyderabad	7th July 2023
11.	Industry Visit to IPCS Global, Hyderabad	24 th June 2023
12.	MoU with IPCS Global, Hyderabad.	3 rd June 2023
13.	Seminar on Patent Drafting and filing	19th Oct 2022
14.	Industrial Visit to Nagarjuna Sagar Hydro Power Plant	19-11-2022.
15.	Workshop on "Industrial Automation"	29th Oct 2022
16.	Workshop on "Analysis and Designing of Electric Vehicle"	28 th Oct 2022
17.	Webinar on "Modelling and Simulation of FACTS Controllers for Powers System Applications using MATLAB"	10.06.2020
18.	Webinar on "Electric Mobility – History and Technology	22 nd May 2020
19.	Webinar on "Road Map to Get a Patent"	21st May 2020
20.	Debate for faculty	27 th September 2019
21.	Group Discussion for students and faculty	13 th & 14 th August 2019
22.	Organized three day Faculty Development Programme on "PEDAGOGICAL TECHNIQUES FOR EFFECTIVE TEACHING"	4 th to 6 th July 2019
23.	Orientation Programme for Lateral Entry Students	22 nd July 2019 nd Developmen

Guest Lecture Delivered

- 1. Delivered Expert lecture on the topic "Design and Development of ANN model using MATLAB Toolbox" in the workshop "Research Methodologies" on 16.08.2013 at Kings College of Engineering, Punalkulam.
- 2. Handled a Hands-on session on "Data Analysis & Visualization using MATLAB" on 27th May, 2014 at Kalasalingam University, Krishnankoil in the FDP on "Data Mining & Big Data Analytics" organized from 26.05.2014 to 30.05.2014.
- 3. Delivered Expert lecture on the topic "Support Vector Machine" in the workshop "Artificial Neural Networks Development using MATLAB" held on 5th & 6th September 2014 at Kalasalingam University, Krishnankoil.
- Delivered Expert lecture on the topic "Introduction of PSAT for Power System Applications" in the FPD Programme on "Software Tools for Simulation and Analysis of Electric System" organized by IEEE Madras section at Kalasalingam University during 18th - 20th December 2014.
- 5. Handled Lab Session in the Workshop on "Soft Computing for

- Research Applications" on 13th August 2015 at Kamaraj College of Engineering and Technology.
- 6. Handled Laboratory Session on the topic "Implementation of ANN" in the FDP "MATLAB Applications to Engineering Problems" held on 14th & 15th October, 2015 at VCET, Madurai.
- 7. Guest Lecture on "Electrostatics II" in the Anna University approved Faculty Development and Training Programme on ELECTROMAGNETIC THEORY on 06.06.16 at VCET, Madurai.
- 8. Guest Lecture on "Support Vector Machine" organized by IEEE Computational Intelligent Society on 07.09.2016 at Kalasalingam University, Krishnankoil.
- 9. Guest Lecture on "Extreme Learning Machine" organized by IEEE Student Chapter on 11.02.2017 at Kalasalingam University, Krishnankoil.
- 10. Guest Lecture on "Principles of Management" organized by EEE Department on 19.07.2017 at K.L.N.I.T, pottapalyam.
- 11. Delivered Guest Lecture on "Load Flow Analysis and Short Circuit Analysis using MATLAB" organized by EEE Department, on 28.06.2017 at Kalasalingam University, Krishnankoil.
- 12. Handled Laboratory Session on the topic "MATLAB Programming" in the FDP held on 16th March 2018 at VCET, Madurai.
- 13. Delivered Guest Lecture on "Modern Teaching Pedagogy Methods for Effective Learning" in FDP organized for JBES by JBIET on 11.08.2018.
- 14. Delivered Guest Lecture on "Introduction to Power System Analysis Tool Box (PSAT) in One week FDP titled "Emerging Trends in Power and Energy: A Research Perspective" Organized by Department of EEE during 7th to 13th August 2019.
- 15. Delivered a Lecture on "Introduction to MATLAB Programming" in the Faculty Development Program organized by Department of Bio-Medical Engineering, Kalasalingam Academy of Research and Education, Krishnankoil, Tamilnadu on 19th May 2020.
- 16. Delivered a Lecture on "Patent Filing" in the Webinar organized by Institute's Innovation Council, J.B.Institute of Engineering and Technology, Hyderabad on 8th January 2021.
- 17. Delivered a Lecture on "Managing Successes and Failures in Life" in Talks under JBGEI Weekly FDP Series on 25th June 2022.

Conference Sessions Chaired

- 1. Acted as Session Chair in the Fifth National Conference on "Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'14 organized by the IEEE student branch on 28th & 29th March 2014 at Kalasalingam University, Krishnankoil.
- 2. Acted as Chair Person for the technical session "Data Mining and Smart Grid", in the Sixth National Conference on "Intelligent Techniques in Control, Optimization and Signal Processing, INCOS'15 organized by the IEEE student branch on 26th & 27h March 2015 at Kalasalingam University, Krishnankoil.
- 3. Acted as Chair Person for the technical session in "2017 IEEE International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS '17), organized by IEEE Student Branch, Kalasalingam University, during 23rd 25th, March 2017.
- 4. Acted as Chair Person for the technical session in "International Conference on Power and Energy System (ICPES '17), organized by EEE Department, Velammal College of Engineering and Technology,

- during 21st to 22nd, April 2017.

 5. Acted as Judge in National Level Technical Symposium for the Paper Presentation Contest organized by Department of Information Technology, Velammal College of Engineering and Technology on 11.08.2017.

 6. Acted as Chair Person for the technical session in "2019 IEEE International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS '19), organized by IEEE Student Branch, Kalasalingam University, during 11th -13th, April 2019.

 Honours & Awards

 1. Received NBA Accreditation for B.Tech EEE Program in JBIET, Hyderabad under Tier I with highest score 736 out of 1000.
 - 2. Recognized as **Institute's Innovation Council (IIC) Ambassador** by AICTE & MHRD's Innovation Cell (MIC) since February 2020.
 - 3. Successfully completed **NPTEL online Course on "Introduction to Machine Learning"** which is 8 weeks course with ELITE Grade during July Sep 2022.
 - 4. Successfully completed **NPTEL online Course on "Deep Learning" which is 12 weeks** course during July Sep 2022.
 - 5. Successfully completed **NPTEL online Course on "Introduction to Smart Grid"** which is 8 weeks course with ELITE Grade during July September 2019.
 - 6. Successfully completed the *NPTEL Online certification exam on Outcome based Pedagogic principles for effective teaching with Elite award* during September 2017.
 - 7. Successfully completed the *STEP PLUS exam with a level of* **11.0** organized by the Hindu NEWS paper Group during January 2018.
 - 8. Received 2 best paper awards in IEEE Conference.