


## **FACULTY-PROFILE**

Name of Teaching Staff	Dr. C. Lakshminarayana			
Designation	Professor (Direct Recruited Professor)			
Department	Electrical & Electronics Engineering			
Date of birth	01.06.1969			
Date of Joining the Institution	20.03.2003			
Qualifications	Ph. D			
Total Experience in Years	Teaching	Industry	Research	
	23 Yrs	--	---	
Papers Published	National		International journal	
	--		25	
Papers Presented in Conferences	National		International conference	
	01		15	
	Total		41	
Ph. D Details – Field & University	Field		University	
	Power Systems Engg		Anna University (Guindy Main Campus)	
Ph. Ds / Projects Guiding	Ph.Ds		Projects at Masters level	
	04=01(PT)+ QIP STUDENT(02)+ FULL TIME Ph. D NDF(01)		16	
Ph.D Awarded	04			
Books Published / IPRs/ Patents	2			
Professional Memberships	LM85407, SENIOR MEMBER IEEE :94215000			
Consultancy Activities	Third Party Inspection, Advisor UPSC,Competitive Exam question paper setting for: UPSC,KPSC,MPSC, Staff selection commission & HPCL			
Awards	➤ Excellence in Higher Education ➤ Fellowship for the Society of Innovative Educationalist and Scientific Research Professional from Malaysia			
Grants fetched	Organization	Tittle		Amount in lakhs &Year
	AICTE, New Delhi	AICTE Grants for National Conference on “Energy Systems and Energy Issues”		1.5
				Year 2001
	DRDO	Design and Implementation of Wireless Energy Harvesting Sensor System with Integrated Data Acquisition and Communication System for Gas Turbine Engine Application.		8.9418
				Dec 2015 to June 2017 Completed
KRDEL	Energy in Conservation &		1.00	

		Energy Efficiency using IOT	2020-2021 <b>Completed</b>
	TEQIP	Design and Implementation of Wind Turbine based Intelligent and Efficient Energy Harvesting Control System	6.00
			June 2016- Dec 2017 <b>Completed</b>
	TEQIP	Solar PV Wind Hybrid With DC Micro Grid	16.00
			July 2016- Dec 2017 <b>Completed</b>
<b>Consultancy Activities executed</b>	LITE SYSTEMS INDUS, Bangalore	3rd Party Certification of checking given parameters of luminaries, GI pole and high mast	0.2
			14-10-2010
<b>Interaction with Professional Institutions</b>	CPRI, PRDC, ISRO,DRDO		
<b>Additions Responsibilities</b>	<ul style="list-style-type: none"><li>▪ <b>Head of the Department EEE:2016-2019 &amp; 2020-2021</b></li><li>▪ <b>Chair,IEEE SSIT Joint Bangalore Chapter</b></li><li>▪ <b>Nodal Officer EAP:2012-2016</b></li><li>▪ <b>Member Board of Studies Electrical Cluster:PES Mandya, New Horizon College.</b></li><li>▪ <b>Member Board of Examiner Electrical Cluster:UVCE, Dr AIT, PESCE, New Horizon College.</b></li><li>▪ <b>Member BOG(BMSCE):2016-2019</b></li><li>▪ <b>UPSC,MPSC &amp;KPSC Technical Advisor</b></li><li>▪ <b>ISTE General Secretary:2009-Till Date</b></li><li>▪ <b>Member Selection Committee:DTE, Govt of Karnataka</b></li><li>▪ <b>Member PhD Review Committee, VTU Belagavi</b></li></ul>		

**PH.D. AWARDED:**

SI No	NAME	TITLE	Ph.D. Awarded	Year	Thesis submitted
1	SHILPA K.C	Scheduling and Allocation in High Level Synthesis Using Evolutionary Computation	YES	2017	
2	PRAKASH D. B	Development of AI Based Algorithms for Reactive Power Compensation in Deregulated Environment	YES	2017	
3	SHAMALA N	Real Time Implementation of Active Filter for Harmonic Suppression in Distribution System	YES	2018	
4	RAJU HAJARE	Design and characterization of FINFET based data path and SRAM memory	YES	2018	

**PATENTS FILED:**

1. **"APPARATUS OF ETCHED COPPER CLAD COOKTOP"**, bearing application no. 201941003947 filed with the Indian Patent Office on January 31, 2019.
2. **"RENEWABLE WIND POWER THROUGH MODIFIED WIND TURBINE ROTOR FOR OPTIMAL POWER MANAGEMENT IN SMART CITIES"**, bearing application no. 202101376 filed with the Australian Patent Office on March 16, 2021.

<b>CENTER OF EXCELLENCE (COE)</b>	
<b>BMSCE-CARES Renewables-Centre of Excellence in Solar Photovoltaic Systems for Rs 25 lakhs.</b>	
<b>BEST PAPER AWARD:</b>	
Lakshminarayana C and Mohammed Arfan, <b>“VLC FOR UNDERWATER OPERATIONS”</b> Third International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT-2018)	
<b>EXPERT LECTURE DELIVERED</b>	
1	Expert talk on ‘Optimization Techniques for power system’ in the workshop on Present Trends in Non-Conventional Practices in Power Engineering conducted during 15/04/2019 – 16/4/2019 at FET, MJP Rohilkhand University, Bareilly.
2	Invited to deliver FDP lecture on <b>“Optimization Techniques for Power System Problems”</b> , organised by Department of Electrical Engineering Delhi Technological University, New Delhi during 4-5.December 2019
3	Invited to deliver FDP lecture on <b>“Development of AI Based Algorithms for Reactive Power Compensation in Deregulated Environment”</b> , organised by Department of Electrical Engineering Delhi Technological University, New Delhi during 4-5,December 2019.
4	Expert talk on <b>“DG integration on loss reduction and peaking loading in rural areas”</b> in the Short-Term Training Program (STTP) on <b>“Smart Grid Technologies for Energy Efficiency and Active Demand Side Management”</b> conducted during 06/01/2021 at New Horizon College of Engineering, Bengaluru.
5	Expert talk on <b>AI APPLICATION FOR PLACEMENT OF DG AND CAPACITOR IN RADIAL DISTRIBUTION SYSTEM"</b> in One Week AICTE Sponsored Online Faculty Development Program (FDP) on <b>“Recent Challenges in Electrical &amp; Electronics Engineering”</b> during 15/11/2021 to 20/11/2021 at <b>Guru Jambheshwar University of Science and Technology, Haryana</b>
6	Expert talk on <b>“Energy conservation ”</b> conducted on the occasion of <b>National Energy Conservation Day-2022</b> organized by institutions Innovation Council Government Engineering college, Ramanagar in association with Institution innovation council mistry of HRD and AICTE during 10/03/2022.
<b>SESSION CHAIR</b>	
1	International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT-2018), DEC 14& 15, 2018
2	4 <sup>TH</sup> International Conference on Academic research in Engineering Management and Information Technology(ICAREMIT-2019), 16-18, April 2019
3	16 <sup>th</sup> International Conference on Remote Engineering and Virtual Instrumentation, REV 2019 in association with International Association of Online Engineering (IAOE), Feb 2019
4	International Conference on Power, Control and Sustainable Energy Systems (ICPCSES-2022) in association with River publishers Virtual On 28th– 30th JULY 2022
5	IEEE International Conference on Advances in Electronics, Communication, Computing and Intelligent Information Systems (ICAECIS-2023),Bangalore 19th– 21th April 2023

**Achievements since the date of joining:**

FD	R&D	No. of Publication	Teaching Award	Books/ Monograph	Conference Seminars	Extracurricular activities*	Admin.
02	04	37	02	--	02	--	05

FD-Faculty Development, R&amp;D-Research and Development

SI NO	Project Guided for PG 4 <sup>th</sup> Semester Students		
	Year	Title of project	Associated Organization
1	2007 – 2009	Ripple Current Generator.	MEHER CAPACITORS PVT.LTD
2	2007 – 2009	Design of Gate drive for IGBT using forward converter.	MEHER CAPACITORS PVT.LTD
3	2009 – 2010	High Frequency current Fed Double Forward, Low High Efficiency, Low Voltage High Current. DC-DC Converter for Spacecraft Application.	ISRO STELLITE CENTRE BANGLORE
4	2010 – 2011	2KW Battery Discharge Regulator.	ISRO STELLITE CENTRE BANGLORE
5	2011 – 2012	High Frequency High Efficiency, Low Voltage High Current DC-DC Converter For Spacecraft Application.	ISRO STELLITE CENTRE BANGLORE
6	2012 – 2013	Field Programmable Gate Array Based Majority Voting Logic Taper Charge Regulator For Spacecraft's.	ISRO STELLITE CENTRE BANGLORE
7	2013-2014	Integrated Boost Resonate Convertor For Photovoltaic Application.	BMSCE
8	2014-2015	Simulation and Implementation of Dual-stage Design Buck and Boost convertors for Low Power Applications.	BMSCE
9	2015-2016	A Novel Design of Cascaded Multi-Level Inverter with Reduced THD for Solar Applications.	BMSCE
10	2016-2017	A Novel Design Of Cascaded Multilevel Inverter With Reduced THD For Solar Applications.	BMSCE
11	2016-2017	Comparision Of Winch Application For Induction Motor And PMSM Drive.	ABB
12	2017-2018	Platform Servo Drive for Medical Applications.	GE HEATH CARE
13	2018-2019	Power Management of Solar and Battery for On-Grid and Off-Grid.	BMSCE
14	2018-2019	Design and Implementation of Solar Synchronous Buck Converter With Lead Acid Battery Charging.	BMSCE
15	2019-2020	Seven Level Modular Multilevel Converter with FFT Analysis.	BMSCE-COE
16	2020-2021	Design of Converter From Single Phse AC Supply to 1kv Pulsating DC Supply Having Power Of 1200Watt	ALPHA DESIGN TECHNOLOGIES
17	2021-2022	Design And Implementation of Speed Control For Three Phase Induction Motor Using Active Front-End Drive	BMSCE-COE
18	2022-2023	Desgin and Implementation of Cycloconverters for Speed Control of Induction Motor	BMSCE

**INTERNATIONAL JOURNALS/CONFERENCES:**

1. Lakshminarayana. C and Mohan. M. R, "A Genetic Algorithm Multi-Objective Approach for Efficient Operational Planning Technique of Distribution Systems", International Journal of European Transactions on Electrical Power Vol. 19, Issue 2, pp. 186-208, March 2009

2. Lakshminarayana. C and Mohan. M. R, "An Improved Technique for Service Restoration in Distribution Systems Using Non dominated Sorting Genetic Algorithm", International Journal of Power and Energy Systems, Vol. 31, No 3, pp. 162-170, 2011.
3. Puttaswamy G. and C.Lakshminarayana C. and Cyril Prasanna Raj P., "Design and VLSI Implementation of VCO for High Speed RF Applications", International Journal of Engineering and Technology (IJET), Vol.3, No.3, June-2011, pp. 244-248.
4. Shilpa.K.C and C.Lakshminarayana, "Low Power/High Speed Design in VLSI With the Application of Pipelining and Parallel Processing" International Journal of Computer & Technology, Vol.2, No.3, June-2012, pp. 96-101:ISSN:2277-3061.
5. Shilpa.K.C and C.Lakshminarayana, "Particle Swarm Optimization For ILP Model Based Scheduling" International Journal of Advanced Research in Computer Engineering and Technology (IJARCET), Vol.3, Issu.6, June-2014, pp. 2150-2154.
6. Shilpa K.C and C.Lakshminarayana, "Natural Computation for Optimal Scheduling with ILP Modeling in High Level Synthesis" Publications: ELSEVIER Procedia Computer Science46 International Conference on Information and Communication Technologies, ICICT 2014, 3-5 pp. 167-175, Jan 2015(DOI:10.1016/J.PROCS.2015.02.08).
7. Shyamala N and C. Lakshminarayana, "An insight to Harmonic Suppression Technique With Power Filter in Power Electronics", International Journal of Computer Applications, Feb – 2015, Vol – 111(9), pp – 26 – 34.
8. Raju Hajare and C. Lakshminarayana, G. H. Raghunandan & Cyril Prasanna raj; "Performance enhancement of FINFET and CNTFET at different node technologies", International Springer Journal of Micro system Technologies. ISSN 0946-7076, March-2015.
9. Arunakumar Siddappa Bhosale and C. Lakshminarayana "Simulation and Implementation of Dual-Stage Design Buck and Boost Converters for Low Power Applications", International Journal of Advance Research and Innovation, June 2015, Volume 3, Issue 2 (2015) 308-311 ISSN 2347 – 3258.
10. Shyamala N and C.Lakshminarayana, "A Presage Mathematical Framework to Leverage Power Quality in Power Electronics." Communications on Applied Electronics (CAE) – ISSN: 2394-4714. Foundation of Computer Science FCS, New York, USA. Volume 2 – No.3, June 2015
11. D.B. Prakash and C. Lakshminarayana, "Multiple DG Placements in Distribution System for Power Loss Reduction Using PSO Algorithm" Publications: ELSEVIER Procedia Technology, Volume/issue 25C – No.3, September 2016, pp:785-792.
12. Shilpa K.C , LakshmiNarayan .C and Manoj Kumar Singh, "Adaptive Differential Evolution For Optimal Schedule In Behavioral Level Synthesis" IOSR Journal of VLSI and Signal Processing (IOSR-JVSP), Vol 6, Issue 4, Ver. I , PP 55-59 ,Jul. - Aug. 2016, e-ISSN: 2319 – 4200, p-ISSN No. : 2319 – 4197.
13. Shilpa K.C and C.Lakshminarayana, "Optimal Resource Schedule in Architectural Level Synthesis using Evolutionary Computations", *Indian Journal of Science and Technology*, Vol 9(31), DOI: 10.17485/ijst/2016/v9i31/96819, August 2016
14. Ganeshwaran Singh.N and C. Lakshminarayana, " A Novel Design Of Cascaded Multilevel Inverter With Reduced THD For Solar Applications", International Journal of Advance Research and Innovation, August 2016, Vol 5, Issue 8 (2016) 282-289 ISSN 2278-0211.
15. D.B. Prakash and C. Lakshminarayana, "Optimal siting of capacitors in radial distribution network using Whale Optimization Algorithm", Elsevier:-Alexandria Engineering Journal, November 2016 <http://dx.doi.org/10.1016/j.aej.2016.10.002>.

16. Shilpa K.C , LakshmiNarayan .C and Manoj Kumar Singh, "A Comparative Study of Different Strategies Using Adaptive Differential Evolution for Best Scheduling in Architectural Level Synthesis", *Indian Journal of Science and Technology*, (accepted for publication) October 2016
17. Md. Shaheriaz and C.Lakshminarayana, "Application of Analytical Techniques for Modeling and Simulation of Aircraft Engine Control System Sensors under Ideal Cycle Analysis Model", *International Journal of Electronics, Electrical and Computational System IJEECS* ISSN 2348-117X Volume 6, Issue 10 October 2017.
18. Rakesh Gole and C.Lakshminarayana "Seven level modular multilevel converter with FFT analysis", *International Journal of Engineering Applied Sciences and Technology*,(IJEAST 2020) ISSN: 2455-2143 DOI: 10.33564.
19. Poornima G and C.Lakshminarayana, "System Integration Framework for Smart City Applications", *Journal of Huazhong University of Science and Technology*, Volume 50, Issue 04, April- 2021. ISSN 1671-4512.
20. Abhishek and C.Lakshminarayana, "Design of Converter from single-phase AC Supply to 1KvV Pulsating DC supply having 1.2 KW of Power " *International Journal of Zeichen*, Vol.7, Issue 8, ISSN No.0932-4747, 2021
21. M N Suneetha and C.Lakshminarayana, "Power Buck Converter Controlled by a Model Predictive Control to Integrate a Wind Energy Conversion System to a DC Micro grid", *International Journal of Design Engineering* Issue 08, pp: 16339-16363 ISSN: 0011-9342 | Year 2021
22. Shilpa K.C, and Lakshminarayana C, "Auto Sunlight Tracking Solar Powered IOT Based Light Control System", *Gradiva Review Journal* Vol: 7, ISSUE 9, PP.112-123, ISSN NO : 0363-8057, 2021.
23. Poornima G and Lakshminarayan .C, "System Integration Framework for Smart City Applications", *Journal of Huazhong University of Science and Technology*, Vol.50, Issue 4, PP.01-19, May 2021, ISSN-1671-4512
24. Shilpa K.C and Lakshminarayan .C, "Optimized Low Power Dual Edge Triggered Flip-Flop with Speed Enhancement", *International Journal of Image, Graphics and Signal Processing (IJIGSP)*, PP.50-63, Pub. Date: 2022-02-08; DOI: 10.5815/ijigsp.2022.
25. Shreekrishnadevaraya and C. Lakshminarayana "Design and Implementation of Speed Control for Three Phase Induction Motor using Active Front End Drive", *International Research Journal of Engineering and Technology*, (IRJET 2022), Vol: 9, Issue 9, PP.1-4, Sep 2022, ISSN: 2395-0056.
26. Shilpa K.C and C. Lakshminarayana, "Nature inspired computation for optimal resource schedule in architecural level synthesis" Publications: ELSEVIER Procedia computer science International conference on Advances in computating and Communications (ICACC 2016), 2016
27. Lakshminarayana C. and Mohan M. R., "An Improved Load Flow Method for the Analysis of Pre/Post Fault Distribution Systems", *IEEE Proceedings of India International Conference on Power Electronics*, Chennai, pp. 239-246, 2006.
28. Lakshminarayana. C and Mohan.M.R, "A New Fuzzy Based power Factor Improvement and Voltage Limit Violation Minimization Technique for Electrical Power Distribution Systems", *IEEE proceedings of third International conference on Artificial Intelligence in Engineering and Technology*, Malaysia, pp.755-760, 2006.
29. Shilpa K.C and C.Lakshminarayana, "Scheduling in High Level Synthesis using Discrete Evolutionary Programming" *IEEE Proceedings of India Third International Conference on Computing, Commmunication and Network Technology*, Chennai, July 2012.
30. Shruthi K J and C.Lakshminarayana, "High Frequency, Current Fed Double Forward Low Voltage High Current DC-DC Converter For Spacecraft Application", *IEEE*

International Conference on Power Electronics, Drives and Energy Systems (PEDES 2012), Bangalore, December 2012.

31. Shilpa K.C and C.Lakshminarayana, "Natural Computation for Optimal Scheduling with ILP Modeling in High Level Synthesis", ELSEVIER Procedia International Conference on Information and Communication Technologies (ICICT 2014), Procedia Computer Science, vol 46 ,pp. 167 – 175,2015  
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32. Raju Hajare, C.Lakshminarayana. Sunil.C, Sumanth, and Anish.A.R; "Design and Evaluation of FinFET based digital circuits for high speed ICs"; IEEE International Conference on Emerging Research on Elctronics, Computer Scieence and Technology(ICERECT-2015), Mandya,Bangalore, December 2015, 978-1-4673-9563-2/15/\$31.00 ©2015 IEEE
33. Raju Hajare,C.Lakshminarayana. Sunil.C, Sumanth, and Anish.A.R; "Performance Evaluation of FinFET and Nanowire at Different technology nodes;" IEEE International Conference on Emerging Research on Elctronics, Computer scieence And Technology(ICERECT-2015), Mandya, Bangalore, December 2015,; 978-1-4673-9563-2/15/\$31.00 ©2015 IEEE.
34. Shilpa K.C and C.Lakshminarayana, "A Comparative Study for Optimal Scheduling In Architecture Level Synthesis Using Different Strategies in Differential Evolution" ELSEVIER Procedia Computer Science International Conference on Advancees in computing and Communication,(ICACC2016), pp.167-175,Dec-2016. (DOI:10.1016/J.PROCS.2015.02.08).
35. Shree Harsha K, C.Lakshminarayana, "Induction Motor Drive based Modelling and Simulation approach for Anchor Operation" IEEE International Conference on Smart Grids, Power and Advanced Control Engineering (ICSPACE2017) Bangalore, Oct 2017.
36. Manjunatha.M, C.Lakshminarayana "Low Voltage High Current Dc-Dc Converter Using Synchronous Rectification For Spacecraft Application", AICTE sponsored national Conference on Energy systyem and Energy Issues(ESEI-2011) , Bangalore, Feb 2011.
37. Md. Shaheriaz, C.Lakshminarayana Ms. Vasanthalakshmi K, and Mr. Prabhakar V: "Design of Low Power Wireless Sensor for Reducing Wiring Complexity of Aircraft Engine Control System",Second IEEE International on Electronics, Communication and Aerospace Technology (ICECA-2018), March 2018.
38. Mohammed Arfan and Lakshminarayana C, "VLC FOR UNDERWATER OPERATIONS" Third IEEE International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT-2018)  
<https://ieeexplore.ieee.org/document/9001519>
39. Mohammed Arfan and Lakshminarayana C, "Design and Development of Solar Electric Hybrid Heated Bed Smart Electric Stove" International Conference on Remote Engineering and Virtual Instrumentation REV2019 2019: Cyber-physical Systems and Digital Twins pp 367-378  
<https://link.springer.com/book/10.1007/978-3-030-23162-0>
40. Mohammed Arfan and Lakshminarayana C, "Vision Intelligent kinetic opensource robot (VIKTOR-III)"; Second IEEE International Conference on Innovative mechanisms for industry applications(ICIMIA-2020).  
<https://ieeexplore.ieee.org/document/9074936>
41. Mohammed Ibadullah, Lakshminarayana C,Ajay Kumar s, Hakshay sundar and Sneha Srinivasan, " Design and Development of mobile Dashboard and Supporting Sensor Network for E-Rickshaw"; Fourth International Conference on Smart Systems and Inventive Technology (ICSSIT-2022).PP.330-334.

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<https://ieeexplore.ieee.org/xpl/conhome/9716239/proceeding>

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*<https://www.scopus.com/authid/detail.uri?authorId=24344195600>*

*<https://www.webofscience.com/wos/author/record/E-9632-2018>*