

National Institute of Technology, Tiruchirappalli:

Performa for CV of Faculty Member



I am S.Mageshwari completed Ph.D in Electrical and electronics engineering from National Institute of technology Tiruchirappalli in 2018 and completed M.E in Electronics from the Madras Institute of Technology in 2005 and its currently working as Assistant Professor in the Department of EEE in the National Institute of Technology Tiruchirappalli for the past 15 years.

1. Name: S.MAGESHWARI
2. Designation: ASSISTANT PROFESSOR
3. Office Address: EEE DEPARTMENT, NIT.
4. Telephone (Direct) (Optional):
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5. Email (Primary):mageshwari@nitt.edu Email (Secondary)
:magesh2909@gmail.com
6. Field(s) of Specialization: Analog and Digital Electronics
Computer Networks, VLSI
Power Electronics and Renewable energy system.

7. Employment Profile

Job Title	Employer	From	To
Lecturer	Sri Sai Ram Engineering College, Chennai.	06.07.2005	28.03.2006
Assistant Professor	National Institute of Technology, Trichy.	29.03.2006	Till date

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D Degree	NITT	2018	NA	Studies on Employment of Roof Top PV Systems in

National Institute of Technology, Tiruchirappalli:
Perfoma for CV of Faculty Member

				Rural Households of India
M.E	MIT,Anna University	2005	8.5	Electronics Engineering
B.E	GCT/Bharathiyar	2002	77.84%	EEE
HSC	STATE BOARD	2000	85%	MATHS-BIOLOGY
SSLC	STATE BOARD	1998	85%	MATHS-SCIENCE

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/ Centre/Institution	From	To
M.Tech/Ph.D Admission Coordinator & BOS Syllabus &Curriculum In charge	EEE	2006	2008
Electronics Lab Purchase Committee Member	EEE	2007	2008
Department Library in charge	EEE	2007	2008
Department coordinator for NITTFEST	EEE	2008	2009
Physical Stock Verification Committee Member	EEE	2008	2015
NBA Co-ordination Committee member	EEE	2008	2019
PAC Chairman for I year I Sem M.Tech(PE)	EEE	2009	2010
Members of Convocation Reception Committee	EEE	2009	2010
Horizontal Review Audit Preparation & BOS Time table In charge	EEE	2010	2011
PAC Chairman for I year I Sem M.Tech(PS)	EEE	2011	2012
Students Counselling Coordinator	EEE	2012	2013
Website in charge	EEE	2012	2013
House Keeping coordinator	EEE	2013	2014
M.Tech Programme Coordinator(PE)	EEE	2014	2015
Electronics Lab In charge	EEE	2013	2018
Power Electronics Lab In charge	EEE	2016	2017
Class Committee Chair person 4 th Semester B.Tech	EEE	2016	2017
Class Committee Chair person M.Tech (PE) I and II year	EEE	2017	2018
Class Committee Chair Person B.Tech (VIII Sem) Final Year	EEE	2018	2019
Anti ragging Committee in charge	Institute	2018	2019
Constitution of committee for monitoring the activities uner NITT -TI-MoU	Institute	2019-20	2021
Anti ragging Committee in charge	Institute	2019	2020
Class Committee Chair person B.Tech (V) Sem 3 rd Year	EEE	2019	2020
M.Tech Programme Coordinator(PE)	EEE	2019	2020
Ph.d Comprehensive Coordinator	EEE	2020	2021
II year B.Tech Class Committee Chairperson	EEE	2020	2021

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty Member

Class Committee Chairper I Year II Sem	EEE	2021	2022
Antiragging, online course and other related Departmental work	EEE	2021	2022
Class Committee Chair person III Year VI Sem	EEE	2021	2022
Hostel Warden (Opal D &F)	Institute	2021	Till date

10. Details of Academic Work

(i) Curriculum Development: Modified in Circuits and Devices Lab and Electronic Circuit Experiments

(ii) Courses taught at Postgraduate and Undergraduate levels:

M.Tech Programme (Power Electronics)

- Computer Networks
- Fuzzy System
- Industrial Control Electronics
- Switched mode power converters

B.Tech Programme (EEE)

- Electron Devices
- Digital Electronics
- Operating System
- Computer Architecture
- Circuit Theory
- Electronic Circuits

B.Tech Programme (first Year)

- Basic Programming in C
- Basic Electrical and Electronics Engineering

B.Tech Programme (Production Engineering)

- Applied Electronics

B.Tech Programme (Chemical Engineering)

- Digital Electronics

B.Tech Programme (Minor electives)

- Analog and Digital Electronics

(iii) Projects guided at Postgraduate level:31

S. N O	Institute	year	Name of the student	Title of the Project
1	NITT	2007-08	Venu Gopal P.V.B	A variable structure control for single ended Primary inductance Converter
2.	NITT	2007-08	Mary Beula. A	Analog Implementation of single phase half – Bridge PWM Rectifier and Simulation of its Application to Transformerless UPS
3.	NITT	2008-09	K.Suman Babu	Simulation of Closed Loop Speed Control of Separately Excited DC motor using Buck

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member

				Converter
4.	NITT	2009-10	O.Prudhui Raj	1. Control of High Frequency AC link Electronic Transformer. 2.A KY Boost Converter
5.	NITT	2009-10	E.Ramdas	1.Small Signal Stability Analysis of SSSC compensated Power System 2.Simulation and analysis of inverter switch open faults
6.	NITT	2009-10	A.Nagaraju	1.Modelling and Control of PV fed Zeta Converter 2.Hardware Implementation of PV fed Zeta Converter
7.	NITT	2011-12	Y.Goutham Kumar	Design of High frequency and High performance voltage regulator module
8.	NITT	2011-12	Savara Vasudeva	Accurate Maximum Power Point Tracker of PV System
9.	NITT	2011-12	Ramesh Manda	DC-DC converter using Cascade Technique
10.	NITT	2012-13	J.Senthilnathan	Closed Loop Automatic PWM based Reversible speed control of DC motor using Microcontroller
11.	NITT	2012-13	C.B.Subramonian	Speed Control of Induction Motor using Artificial Intelligent Techniques
12.	NITT	2012-13	Savara Vasudeva	Distributed FACTS –A new concept for Realizing Grid Power Flow
13.	NITT	2013-14	O.Rakesh Pal	1 .Integration of PV and Battery Hybrid System to the Grid. 2.Control of DSTATCOM by using IcosØ Algorithm
14.	NITT	2013-14	Hanumatha Rao	1. A Buck-Boost Based DC/AC Converter for Residential PV Application. 2.Hardware Implementation of a Buck-Boost Based DC/AC Converter for Residential PV applications
15.	NITT	2014-15	G.Ganesh	1 .A Buck-Boost Based DC/AC converter for Residential PV Applications Using Fuzzy Logic Controller. 2.Hardware Implementation of Buck-Boost Based DC/AC converter for residential PV applications
16.	NITT	2014-15	A.Subhash Kumar Reddy	1.Analysis and Implementation of Bidirectional DC-DC Converter using Coupled Inductor in Stand-alone PV application 2. Hardware Implementation of Bidirectional DC-DC Converter using Coupled Inductor in Stand-alone PV application.
17.	NITT	2014-15	Mithuan	1. Design of an Embedded adaptive Fuzzy logic Controller for a single Phase inverter. 2. FPGA Implementation Single phase Grid

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member

				Connected Inverter.
18.	NITT	2015-16	R.Venkataeswara Reddy	1. Current Fed Soft Switching PUSH-PULL based DC-DC converter fed with PV for Grid Connected System. 2. Hybrid switched Mode Power Supply System Using the Solar Cell.
19.	NITT	2015-16	M.Nagaraju	1. An Interleaved Boost converter with Zero-Voltage Transition. 2. Hardware Implementation of an interleaved Boost Converter with Zero Voltage Transition.
20.	NITT	2016-17	Akhil .S	1.Design and Development of Embedded Controller for four Leg DSTATCOM 2.Hardware Implementation of Design and Development of Embedded Controller for four Leg DSTATCOM
21	NITT	2016-17	A.H.C.Lakshmikanth	1. Control Scheme Design for Constant current Charging and Discharging of Battery. 2. Hardware Implementation of Control Scheme Design for Constant Current Charging and Discharging of Battery.
22	NITT	2017-18	Deepak kumar	1. Solar Array Fed Brushless DC Motor Driven Water Pump Using Boost Converter. 2. Hardware Implementation of Solar Array Fed Brushless DC Motor Driven Water Pump Using Boost Converter.
23	NITT	2017-18	Ajeet Kumar	1. A Buck-Boost Based DC/AC Converter for Grid Connected PV System. 2.Hardware Implementation of a Buck-Boost Based DC/AC Converter for Grid Connected PV System
24	NITT	2018-19	Konde Sandeep	Design and Simulation of Self Adaptive Differential Protection for a Power Transformer.
25	NITT	2018-19	Kunsoth Srinivas	Novel Control Topology for Illumination Control of a PV Fed Lighting System.
26	NITT	2019-20	VinothKumar J	1.Fuzzy Adaptive Particle Swarm Optimization Based MPPT Technique in PV Systems. 2.Design and analysis of Novel SEPIC based DC-DC converter with PSO algorithm.
27.	NITT	2019-20	Vinnakota Pavani	1.Design of fault Detection and Location Algorithm for Transmission lines. 2. Nonlinear PID controller based on popovs stability criteria for PV systems.
28	NITT	2020-21	Balaraju	1. Lyapunov based stability analysis of SSSP grid connected PV system. 2. LLC resonant converter utilizing Series-Parallel connected transformer for EV on board battery charger applications.

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member

29	NITT	2021-22	Sai Vamshi	1.Maximum Power Point Tracking in PV Systme with high gain Modified SEPIC Converter 2.A Bidirectional Modified SEPIC Converter with PV and Battery Storage
30	NITT	2021-22	Abhishek Bharti	Vehicle to Grid Technology in a Micro grid Using DC Fast Charging Architecture
31	NITT	2021-22	Pallav Sharan Shrivastava	Active load Current Balancing Between Isolated Power Supplies feeding Large Loads

(iv) Other contribution(s): one of coordinator of NBA Committee, Accreditation got five years in both UG and PG programme.

11. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Power Optimization Controller in Switched Mode Power Supplies Connected with Renewable energy Sources	MHRD	2014	2019	Completed
Analysis and design of modified sepic converter with wide band gap device for high frequency applications	IEI	2022	2023	ongoing

12. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National / Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
15 th -17 th April 2006	Work Shop on “Cyber Laws”	National	Participant	NIT Warangal	Andra Pradesh
4 th -6 th Jan 2007	Embedded Systems on chip	5 th International Conference TIMA	Participant	NIT	Trichy
12 th -16 th June 2006	Short Term Course on and “Microcontroller	National	Participant	NITTTR	Chennai

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member**

	Application”					
12 th -16 th March2007	Train the Trainer Programme	National	Participant	NITT ,Trichy	Chennai	
4 th -15 th June 2007	Two Week Course on Analog VLSI Design	National	Participant	TCE	Madurai	
17 th -18 th August2007	Workshop on” Overview of VLSI –CAD Tools”	National	Participant	NIT	Trichy	
20 th -27 th August 2007	Workshop on “Wind Power Integration”	National	Participant	NIT	Trichy	
12 th -13 th Oct-2007	All India Workshop on Recent Trends in Energy Management	National	Participant	The Institution of Engineers(India)	Trichy	
27 th Dec 2007	3 rd National Conference on ICECON2007 “Preconference Tutorial on SCILAB”	National	Participant	NIT-ICE department	Trichy	
2 nd -3 rd Jan 2008	IEEE workshop on “Energy,Environment and Importance of Power Electronics”	National	Participant	IIT	Delhi	
29 th feb 2008	Workshop on “Multivariable Control Systems”	National	Participant	NIT(Chemical Dept)	Trichy	
28 th -1 st feb 2008	Sort Term course on “Electrical Machines andPower Electronics in Renewable energy Systems”	National	Participant	NIT(EEE)	Trichy	
16 th -28 th une 2008	“Power Electronics and Renewable Energy Electric Conversion Systems”	National	Participant	MHRD-AICTE NITT(EEE)	Trichy	
7 th Aug 2008	“Analog VLSI Filters and Mixed signal Design”	National	Participant	ECIT	Bangalore	
7 th -12 th Aug 2008	Induction Training Programme on “ Instructional Design and Delivery”	National	Participant	NITTTR	Chennai	
24 th -28 th March 2008	Five day Residential Sensitization workshop under Capacity building of Women Managers in Higher education	National	Participant	Bharathidasan University (CWS)	Trichy	
19 th Feb 2009	Computer Networking – Hardware&Software	National	Participant	M/sSANAT Tech,Chennai	Trichy	
4 th may	“Power Electronics	National	Participant	NaMPET	Trichy	

**National Institute of Technology, Tiruchirappalli:
Perfoma for CV of Faculty Member**

2009	Simulation-SEQUEL”					
18 th feb 2010	Welding Power Source Evaluation & Process Control	National	Participant	IWS & WRI	Trichy	
20 th -21 st Dec 2010	High Voltage DC Transmission Systems	National	Participant	CPRI	Bangalore	
13 th -14 th July 2012	“FPGA Based System Design”	National	Participant	NIT(EEE)	Trichy	
5 th -6 th Oct 2012	“Class Room Management & Communication”	Local	Participant	NIT	Tanjore	
4 th -5 th Jan 2013	“Wind Energy Electric Conversion Systems”	National	Participant	NIT(EEE)	Trichy	
11 th -12 th Oct 2013	“Hybrid Power generation Systems	National	Participant	CPRI	Bangalore	
2 nd -12 th Dec 2014	Two week ISTE workshop on “Control Systems”	National	Participant	National Mission on Education through ICT(MHRD)	NIT, Trichy	
28 th -29 th April 2015	“Conclave on Academic Reforms”	National	Participant	TEQIP-II	NIT, Trichy	
4 th -5 th March 2016	Short Term Course on “Role of Power Electronics in Power Engineering”	National	Participant	TEQIP- II(NIT)EEE	Trichy	
11 th to 15 th May 2020	Online Training Programme on “E-Content Development”	National	Participant	NITTTR Chennai	NITTTR Chennai	
Aug 26 th to Sep 3 rd 2021	Ten days orientation Programme for faculty members @ Siemens CoE in Manufacturing, NITT – reg.	National	Participant	NITT	Trichy	

13. Workshops/ Symposia/ Conferences/Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Workshop on Electronic Circuit Design Techniques	National	28-09- 2007 & 29- 09-2007	Coordinator	NITT
Finishing School Programme	National	May & June 2007 & 2008	Coordinator	NITT
Workshop on MSP 430 Microcontroller Based System Design	Local	Feb 22 & 23 2013	Coordinator	NITT

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member

Workshop on Real time controller Design Using C2000 Microcontroller	National	Sep 26 th & 28 th 2014	Coordinator	NITT
FDP on Artificial Intelligence Using deep learning & Machine Learning	National	Nov26 th &30 th 2018	Coordinator	NITT
Five day online Workshop on “Renewable Energy Grid Integration – Challenges and Operational Strategies”	National	Jan 18 th – 22 nd 2021	Coordinator	NITT
FDP on Technologies for Smart Electrical Power grids	National	May 24 th – May 28 th 2021.	Coordinator	NITT
FDP on Electric Vehicles	National	June 7 th – Jun 11 th 2021	Coordinator	NITT
FDP Life skill Management Dec 27 to 31 ATAL	National	Dec 27 th – 31 st 2021	Coordinator	NITT

14. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Annual Member	IEEE Membership	92598528 & 11.02.2016
Membership	IEI –Trichy local center	M-1629004 &30.09.2018

15. Publications

(S) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No)	Page numbers	Year	Impact Factor of the Journal (Optional)
S.Mageshwari	Simplified Topology for single phase to three phase conversion for	International Journal of Power systems and Power electronics	4		2011	

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member

	Induction Motor Drive using a single phase half – bridge PWM Boost Rectifier and a Three-leg inverter					
S.Mageshwari	Implementation of grid connected Single Phase Inverter	International Journal of Electrical and Electronics Engineers	9	11-24	2017	1.6
S.Mageshwari	Closed loop operation of DC-AC Dual buck full bridge inverter for grid connected operation of renewable energy sources	International journal of advanced Technology in engineering science	5		2017	2.87
Mageshwari, S. S. Arul Daniel and N.Ammasai Gounden	Feasibility studies of rooftop photovoltaic (PV) systems for domestic consumers in rural India.	<i>International Journal of Energy and Statistics,</i>	5(1),		2017	pp.175005-1-17005-17.
Mageshwari, S	Infrastructure of net zero energy homes in India.	<i>World Journal of Technology Research and Engineering,</i>	2(1),		2017	PP.189-195.
S.Mageshwari, S.Kanaga Lakshmi and Hanumatha Rao	Design and Implementation of Buck-Boost Converter for Residential PV applications	<i>IJEEI(International Journal on Electrical Engineering and Informatics)</i>	9(4)		2017	pp.834-849
S.mageshwari and S.Malarvili	Nonlinear PID (N-PID) Controller for SSSP Grid	<i>Electric Power Systems Research</i>	211		2022	pp.1-13

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member

	Connected Inverter Control of Photovoltaic Systems				
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(B) Conferences/Workshops/Symposia Proceedings

S. No	Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Conference Theme	Venue	Year
1	S.Mageshwari	Distributed Network Monitors and Network Traffic Generators	VESCOM 2005	VESCOM 2005	KEC Salem	2005
2	S.Mageshwari	Modified fast linear Load flow method inducing Generator Q limits	CIPS 2006	CIPS 2006	SRM, Chennai	2006
3	S.Mageshwari	Simplified Topology for single phase to three phase conversion for Induction Motor Drive using a single phase half –bridge PWM Boost Rectifier and a Three-leg inverter	NCEEES	NCEEES	Anna University Chennai	2008
4	S.Mageshwari	A High efficiency Buck- Boost DC/DC Converter for Residential PV Application	IC31CT-2015	IC31CT-2015	Bangalore	2015
5	S.Mageshwari	Multimodel Based Control of pH Neutralization Process	66 th Canadian Chemical engg conference	66 th Canadian Chemical engg conference	Canada	2016
6	S.Mageshwari	RealTime Implementation of Multimodel ANFIS Controller in pH Neutralization Process	CHEMCON 2016	CHEMCON 2016	ACTECH Chennai, India	2016
7	S.Mageshwari	Implementation of Grid Connected Single Phase Inverter	6 th International Conference on Recent Trends in Engineering ,Science &Managemnet (ICRTESM-	6 th International Conference on Recent Trends in Engineering ,Science	NITTTR, Chandigarh, India	2017

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member

			17)	&Manage mnet (ICRTESM -17)		
8	S.Mageshwari	Closed loop operation of DC-AC Dual buck full bridge inverter for grid connected operation of renewable energy sources	3 rd international conference on recent development in engineering science, humanities and management	ESHM2017	NITTTR Chandigarh India	2017
9	S.Mageshwari, S.Arul Daniel and N.Ammasai Gounden	Comparison of Domestic Lighting Systems fed from various sources	Proceedings of the 6 th international conference of Advancements in Engineering and Technology	Proceedings of the 6 th international conference of Advancements in Engineering and Technology	Feb 23-24 th , Sangrur, Punjab, India. PP: 60-65.	2018
10	S.Mageshwari	A Simple Power Electronic Interface based on DSP Controller for Control of DC Motor Fed from Solar Photovoltaic Cells	Proceedings of the 6 th international conference of Advancements in Engineering and Technology	Proceedings of the 6 th international conference of Advancements in Engineering and Technology	Feb 23-24 th , Sangrur, Punjab, India	2018
11	S.Mageshwari	Design of Control Strategy of DC/AC Converter for Grid Connected PV System	IEEE International Conference on Electrical, Control and Instrumentation Engineering	ICECEE 2019	Nov 25 Kuala Lumpur Malaysia	2019

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member

12	S.Mageshwari And Sandeep	Design and Simulation of Self Adaptive Differential Protection for a Power Transformer	7 th International Conference on Electrical Energy Systems	ICEES 2021 SSN College of Engineering Chennai	Feb 11-13 th 2021 Chennai	2021
13	S.Mageshwari and Vinoth Kumar	Implementation of PSO Algorithm in Novel SEPIC Converter with PV fed Source	International Conference on Interdisciplinary Research in Technology & Management	IRTM 2021 Kolkata	Feb 26 th - 28 th 2021 Kolkata	2021
14	S.Malarvili S.Mageshwari and Vinothkumar	An Artificial Intelligent Parameter Based PSO for Maximum Power Pont Tracking of PV Systems Under PSC	IEEE 17 th International Colloquium on signal processing & its Applications	CSPA2021	March 5 th -6 th 2021 Malaysia	2021
15.	S.Malarvili and S.Mageshwari	Lyapunov -Krasovski based Stability analysis of SSSP Grid Connected Photovoltaic System	SMART GECON 2021 Scopus IEEE	AISSMS College of Engineering ,Pune	29 th -30 th October 2021	2021
16.	Sindhuja Selvam ,Mageshwari Sannasy and Moorthi Sridharan	An Improved Gain Noncoupled Inductor Modified SEPIC Converter with Voltage Multiplier Cell	INDICON 2021, Guwahati,India	IIT Guwahati India	19 th -21 st December 2021	2021
17	S.Malarvili and S.Mageshwari	Nonlinaer PID(N-PID) Controller Based Voltage reference control of DC-DC Converter	36 th National Convention of Electronics and elecommunication Engineers on Antenna Design for Efficient Communication and Networking	Bathinda	4 th -5 th December 2021	2021
18.	Sindhuja Selvam ,Mageshwari Sannasy and Moorthi	Small Signal Modelling of Two Switch Enhanced Gain Modified SEPIC Converter	IEEE international conference on Power electronics,	Kerala	Jan 2-3rd	2022

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty Member

	Sridharan		Smart Grid and Renewable Energy			
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