

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Curriculum Vitae



Brief Profile: 1-2 paragraphs (not exceeding 500 words)

G. Saravana Ilango (SM'17) received the Graduate degree electrical and electronics engineering from the University of Madras, Chennai, India, in 2000, the Master's degree in power electronics and drives from Bharathidasan University, Tiruchirappalli, India, in 2001, and the Ph.D. degree in electrical engineering from the National Institute of Technology (NIT), Tiruchirappalli, India, in 2009. From 2001 to 2004, he was a Lecturer with the Noorul Islam College of Engineering, Kumaracoil, India. In 2006, he joined the Department of Electrical and Electronics Engineering, National Institute of Technology Tiruchirappalli, India, where he is currently an Associate Professor.

His research interests include FACTS controllers, digital controllers, and renewable energy systems.

1.	Name	Dr. G. Saravana Ilango
2.	Designation	Associate Professor
3.	Office Address	Department of Electrical and Electronics Engineering National Institute of Technology, Trichirappalli-620 015
4.	Telephone (Direct) (Optional): Telephone : 3259 Extn (Optional): Mobile (Optional):	
5.	Email (Primary):gsilango@nitt.edu	Email (Secondary) :
6.	Field(s) of Specialization	Power Electronics

7. Employment Profile

Job Title	Employer	From	To
Associate Professor, Dept. of EEE	NIT-Tiruchirappalli	March 2018	Till date
Assistant Professor, Dept. of EEE	NIT-Tiruchirappalli	March 2006	March 2018
Research Associate, Dept. of EEE	NIT-Tiruchirappalli	March 2005	March 2006
Lecturer, , Dept. of EEE	Noorul Islam college of Engineering, Kumarakoil	June 2001	July 2004

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	NIT-Tiruchirappalli	2009	-	Investigation of Internal Control Strategies for Effective Control of Power Flows with UPFC in a Power Transmission System
M.E.	Bharatidasan University	2001	74.93%	Power Electronics & Drives
B.E	Madras University	2000	74.59%	Electrical & Electronics Engineering
HSC	V.K.P. Hr. Sec. School	1996	84%	-
SSLC	V.K.P. Hr. Sec. School	1994	87.4%	-

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Associate Dean (P&D)	NIT-Tiruchirappalli	2012-10-10	23-11-2015
Warden (Beryl/Amber B)	NIT-Tiruchirappalli	2010-12-01	03-12-2012
Deputy Warden (Sapphire)	NIT-Tiruchirappalli	2005-07-20	20-06-2007
Staff Advisor for Festember	NIT-Tiruchirappalli	2010-06-01	31-10-2010
Department Project Evaluation Committee member	NIT-Tiruchirappalli	2014-01-01	31-10-2017
Coordinator for Industrial Lectures	NIT-Tiruchirappalli	2017-01-01	31-05-2017
Coordinator for Internship/Industrial Training	NIT-Tiruchirappalli	2017-01-01	31-05-2017

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
PhD Viva-Voce External	CSI Institute of Technology	2017	2017

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Examiner	Kanyakumari		
Expert Lecturer	Kalasalingam University	2016	2016
Member of auditing the Quality of Question Paper	Kalasalingam University	2011	2014
Technical committee member of IEEE Sponsored International Conference	Noorul Islam Centre for Higher Education	2012	2012
Board of Studies Member	Noorul Islam Centre for Higher Education	2010	2010
Board of Studies Member	K. S. Rangasamy College of Technology	2010	2010

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2009	Young Scientist Award	DST, Govt. of India

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2017	Bhaskara Advanced Solar Energy (BASE) Fellowship	DST- Indo-U.S. Science and Technology Forum (IUSSTF)	April 2018	July 2018
2017	Young Faculty Research Fellowship	DEITY, Govt. of India	January 2018	January 2023

13. Details of Academic Work

(i) Curriculum Development

- Introduced new course for B. Tech students- Power Electronics Application to Power Systems
- Introduced new course for M. Tech students - Digital Simulation of Power Electronics System
- Introduced new laboratory for B. Tech students- Solar PV and Renewable Energy Laboratory
- Developed new research laboratory- Power Converter Research Laboratory

(ii) Courses taught at Postgraduate and Undergraduate levels

Linear Integrated Circuits, Power Electronics, Flexible AC Transmission System, Digital Electronics, Power Electronics Application to Power Systems (New Course Introduced), Digital Simulation of Power Electronics System (New Course Introduced)

(iii) Projects guided at Postgraduate level

Title	Student Name	Year
A Study on Degradation of PV Modules	Nitheesh R	2017
Interleaved Boost Converter for Solar PV Applications	Aju Sivan	2017

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

Series Active Ripple Port Inverter With Improved Source Utilization and Reduced Size	Habeeb Rahman	2017
Design and Analysis of an Isolated High Gain Converter for Solar Applications	Gourav Hazra	2017
Hybrid Series Photovoltaic Generation in SCIG Based Wind Farms	Navas Ali K	2016
Loss Minimization Control of Induction Motor Drive	Rajesh Kumar Padhy	2016
Control Strategies to Reduce Charging Discharging Cycle of BESS Using EDLC	Vijayanarayanan S	2016
Fault Analysis and Detection in PV Array	Hariharan R	2016
Analysis of Different Schemes for Enhancement of Power From a Seasonal Wind Farm	Kandala Naga Sai Uma Mahesh	2015
A Micro Inverter for PV Fed Grid System	Rai Rama Krishna	2015
Multi Phase Interleaved Boost Converter for SPV Applications	Chinthakindhi Vinay	2015
Control Scheme for Grid Connected Inverter	Kathiripalli Dhanashekhar Reddy	2015
Design and Development of a Bidirectional Converter for SPV Applications Using FPGA	Manoj R	2014
Design and Development of an Interleaved Boost Converter for SPV Applications	Nandam Srinivas	2014
Control Scheme for Bidirectional Converter in a Self Sustaining Low Voltage DC Nanogrid	RaiRamkrishna	2014
Controller for Isolated Operation of Laboratory Synchronous Generator and Feasibility Report for Implementation of DCS at Loktak Power Station	P. Elango	2013
Investigation of Autonomous and Non-Autonomous Operation of PV Fed Inverter to Grid Using FPGA	Raja Sekhar Kammala	2013
Battery Management Scheme for Isolated Power System	Nitesh Kumar Anand	2013
Investigation of Microgrid Using Droop Controller Scheme	Gananath Das	2013
Investigation of Power Flow Control in an Isolated Grid Using Battery Energy Storage System	Rahul Sukumaran	2013
Autonomous and Non-Autonomous Operation of PV Fed Inverter With An_ Island Feature Using FPGA	Mudiyula Srikanth	2012
Control of Three Level Inverter Fed Three Phase Induction Motor	V v N S S R M Krishna K	2012
Inphase Compensation Method for Voltage Sags and Swells Using DVR	Sasidhar Reddy	2011
Bi Directional Unity Power Factor Converter for PV Application Using FPGA	Nikhil J	2011
Current Controlled PV Fed Inverter With Anti-Islanding Features Using FPGA	M. Srikanth	2011
Power Conversion Interface for Wind Turbine Driven Self Excited Induction Generator	Y.Naresh	2011
Power Quality Conditioning Using Universal Custom Power Conditioner	K.S.V.Mahesh	2010

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Three Phase Bidirectional UPF Converter for PV Applications	B.Siva Kumar Reddy	2010
Battery Charging and Discharging by Constant Current and Constant Voltage Method	Ramesh Pale	2010
Cost Effective Shunt Active Filter Using Resistance Emulation Technique	P.Srinivasa Rao	2008
Implementation of Various PWM Techniques for FACTS Application Using DSP	J.Chelladurai	2008
Development of DSP Based Control Schemes for UPFC	A.V.S.S.R.Sai	2007

(iv) Other contribution(s)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Development of Modular Multilevel Converter for Enhancing Power Quality and PV Output Power under Partial Shading Conditions in Grid-Connected PV System	SERB, Govt. of India	2018	2020	Ongoing
Design and Development of Solar PV Powered Cold Storage System	DST, Govt. of India	2016	2019	Ongoing
Detection of Partial Shading and Fault in a Solar Photovoltaic Systems	Deity Visvesvaraya Fellowship scheme	2017	2022	Ongoing
Electronification of Ground Water Control and Conveyor Systems in Mines	Ministry of Coal, Govt. of India	2017	2018	Ongoing
Dynamic Loading of Conveyor Drive Heads in Mines	NLC, Neyveli,	2015	2017	Completed
Electrical Performance Evaluation of TEG System in Boiler Flue Gas Duct	BHEL, Tiruchirappalli	2016	2017	Completed
Development of DC – DC Converter and Bi – Directional Converter for SPV applications	DEITY, Govt. of India	2012	2014	Completed
Design and Development	DST, Govt. of	2009	2012	Completed

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

of Improved Shunt Active Filter with Enhanced Signal Processing with Due consideration for Distorted Utility	India			
Power Electronics Lab Infrastructure Development	DEITY, Govt. of India	2008	2009	Completed

15. Number of PhDs guided : 6

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
M. Chakkarapani	Development of GMPPT algorithm with partial shading detection and fault identification scheme in PV system	Supervisor	2017
Sarojini Mary. S	Investigation of static reconfiguration technique of modules and power electronic controller for solar photovoltaic system	Co-Supervisor	2017
Venkata Ram Raju Rudraraju	Certain control strategies for wind driven induction generators at low speed	Co-Supervisor	2016
P. Srinivasa Rao	Investigation of module interconnection schemes and control strategies for photovoltaic system	Supervisor	2015
C. K. Aravind	Investigation of control strategies for autonomous and non-autonomous operation of wind energy conversion system	Supervisor	2015
B. Indu Rani	Investigation of control techniques for effective utilization of solar PV system	Supervisor	2013

16. 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

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

17. 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
National Power System Conference NPSC-2018	International	Dec 2018	Organizing Secretary	NIT Tiruchirappalli
MHRD-GIAN program on “SiC Devices Enabled Power Converters Applications, Opportunities and Challenges	National	11 th to 15 th December, 2017	Organizing Secretary	NIT Tiruchirappalli
Workshop on “Photovoltaic Module Interconnection Schemes and MPPT Implementation”	Local	27 th and 28 th May, 2017	Organizing Secretary	NIT Tiruchirappalli
Workshop on “Application of Power Electronics to Renewable Energy Systems and Micro Grids	Local	8 th to 10 th Feb., 2015	Organizing Secretary	NIT Tiruchirappalli
Workshop on “Power Electronics and Measurements”	Local	2 nd and 3 rd May, 2013	Organizing Secretary	NIT Tiruchirappalli
STTP on “Modeling of Electrical System Using Matlab/Simulink”	Local	21 st and 22 nd July	Organizing Secretary	NIT Tiruchirappalli
Workshop on “Solar Photovoltaics Fundamentals	Local	11 th to 22 nd Dec, 2011	Organizing Secretary	NIT Tiruchirappalli
Workshop on “Power Electronics for Polytechnic College Teachers”	Local	24 th and 25 th June	Organizing Secretary	NIT Tiruchirappalli

18. Invited Talks delivered

Topic	Date	Inviting Organization
Design of Grid Connected Photovoltaic System	2017	MEPCO SCHLENK College of Engineering, Sivakasi
Sustainable Energy System	2016	Kalasalingam University
Embedded Control for PV Fed Electric Drive System	2015	Annamalai University
Power Quality Issues in Contemporary and Future Power Networks	2013	Thiagarajar College of Engineering
Electrical Power Utilization and Energy Auditing	2010	K.S.R College of Engineering
FACTS Controllers in	2008	The Institute of Engineers

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

Power Systems		
Seminar on FACTS	2008	CSI Institute of Technology
Reactive Power Issues of Wind Farms	2007	World Ins_tute of Sustainable Energy
Recent Trends in FACTS Controller and Their Applications in Power Systems	2006	MEPCO SCHLENK College of Engineering, Sivakasi
Soft Computing Techniques for Controls Design	2006	Noorul Islam College of Engineering

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Senior Member	IEEE	90752271
Associate Member	Institute of Engineers	

20. Academic Foreign Visits

Country	Duration of Visit	Programme
USA	3 months	Bhaskara Advanced Solar Energy (BASE) Fellowship

21. Publications

Separate file is attached