

## **Dr. M.SENTHIL KUMARAN**

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SSN College of Engineering,  
Department of Electrical and Electronics Engineering  
Kalavakkam- 603 110

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### **EDUCATION**

PhD – Anna University, August 2013.

Dissertation: “PWM Techniques for Matrix Converters – Investigations and Applications.”

ME - First class with University fourth in Electrical Engineering, specialized in Applied Electronics, Hindustan College of Engineering, University of Madras, December 2001.

BE – First class with Distinction in Electrical Engineering, R.M.K College of Engineering, University of Madras, April 1999.

6<sup>th</sup> to 12<sup>th</sup> (1988 to 1995), S.B.O.A, Anna Nagar.

LKG to 5<sup>th</sup> (1981 to 1988), Bains School ,Kilpauk.

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### **EMPLOYMENT: [15 YEARS]**

SSN College of Engineering, Anna University, Kalavakkam.

September 2013 – Present, Associate Professor.

March 2009 – August 2013, Assistant Professor.

August 2005 – March 2009, Senior Lecturer.

March 2005 – August 2005, Lecturer.

Easwari Engineering College. Madras University and Anna University, Ramapuram.

May 2002 – November 2004, Lecturer.

E.V.P Engineering College. Madras University, Chemberambakkam.

December 2001- May 2002, Lecturer.

December 1999 - August 2000, Lecturer.

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**AREA OF INTERST:**

Power Electronics and its control specifically for Wind and Solar Energy Conversion Systems.

PCB Designing for control circuit development up to two-layers and Hardware development.

Embedded Programming for Microcontrollers, DSPs and FPGAs.

Small Robot designing for Intelligent Solution Systems.

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**SUBJECT HANDELLED:***At BE level*

Electromagnetic Theory, Electrical Machines, Digital Electronics, Microprocessor, Control Systems and Electric Circuit Theory.

*At ME level*

DSP and PIC Microcontroller, Special Machines Lab.

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**FUNDED PROJECT:**

Co-investigator for the “Study and control of week grid connected matrix converter based DFIG systems” project of 8 lakhs funded by the Ministry of New Renewable Energy Systems- India (MNRE) and Center for Wind Energy Technology – Chennai (CWET).

Co-investigator for the “Study and control of DSTATCOM for wind energy system” project 3 lakhs funded by the management of SSNCE- Kalavakkam.

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## **PROFESSIONAL SERVICE**

Initiated and supported the BE level students of SSNCE for having a self supporting club for electrical ROBOTS that solves complicated robots algorithms with sensors and small electric motors named ERF – Electrical Research Fraternity CLUB. The club self supported itself by conducting the PCB, Microcontroller programming between department and other colleges for raising funds.

Conducted a teaching and demonstration session – “On Fundamental of Electro Physics” for 12<sup>th</sup> standard students at SSN college of engineering in INSPIRE 2009 and INSPIRE 2011.

Was an invited speaker for the “Modeling and design of wind energy systems in MATLAB simulink environment-2012” at Vellore institute of technology funded by UGC – Chennai campus.

Served as a chair for a paper presentation session in national conference on, “Recent Trends in Instrument and Control Technology-2013” at Anand institute of technology.

Conducted a Practical teaching session along with the students of SSNCE – “On Physics and Chemistry” for 9<sup>th</sup> and 10<sup>th</sup> standard students at DRBCC Government School, Perembur, 2013.

Conducted a Practical teaching session along with the students of SSNCE – “On Physics” for 9<sup>th</sup> and 10<sup>th</sup> standard students at Isha school, 2015.

Delivered a lecture at Annamalai university (EIE Department) on Space vector modulation technique – with demonstration, 2014.

Conducted a two day work shop on MATLAB – Xilinx interface for control of drives at Loyola College of Engineering. Nungambakkam.

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## **SERVICE AT SSNCE**

Developed server based Attendance and Cycle Test Mark entry software named Electserver for the electrical department using Tomcat server and JSP.

Developed the Advanced Power Electronic Laboratory at SSNCE which serves as a Research Lab for the department. Currently the Incharge of the same Lab.

Incharge of Department Internet and Intranet activities.

Co-ordinate two workshops in the department of electrical and electronics engineering at SSNCE.

- 1) “Real time Engineering Simulators” - A complete hands on tutorial type workshop conducted jointly by OPAL RT and CoreEL Technologies.
- 2) “Control of power converters using Matlab Xilinx interface” A complete hands on tutorial type workshop with more than 30 participants. Lecture and demonstration with hands on was performed by M.Senthil Kumaran AP/ EEE/ SSNCE.

Served as a speaker for six Invited lectures at SSNCE

- 1) Faculty development program for FACTS devices -2012, funded by Anna University, “Power converters for FACTS devices”.
- 2) Workshop on Renewable energy systems – 2012 “Wind energy scenario in power systems”.
- 3) National conference PEARS – 2011, funded by ISA, “Evolutionary programming techniques and its need in modern power systems”.
- 4) Faculty development program for power systems – 2010, funded by Anna University, “Space vector modulation technique for electrical machines”.
- 5) Workshop in ECE department -2010, funded by IEEE Madras Section, “Electromagnetic Waves”.
- 6) National conference PEARS -2009, funded by ISA, “Modeling and control of Wind energy systems”.

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**M. SENTHIL KUMARAN**  
**AP /EEE /SSNCE**

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