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025.



Present Position

Professor, Department of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai from April-2008.

Present Additional Responsibility

- Director, Centre for Academic Courses, Anna University, Chennai.

Previous Positions

- Associate professor, Department of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai during April-2014 and April-2014.
- Assistant Professor, Department of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai during March-2005 and March-2008.

Previous Additional Responsibility

- Additional Director, , Anna University, Chennai during August-2018 and August-2019.
- Deputy Director, , Anna University, Chennai during July-2014 and July-2018.
- Head Of The Division, ELECTRICAL DRIVES AND EMBEDDED CONTROL (EDEC) - M.E. Programme, Anna University, Chennai during February-2006 and June-2009.

Other Employment

- Assistant Professor, CEG, Anna University for 3 years (31.3.2005 - 31.3.2008).
- ASSOCIATE PROFESSOR, ANNA UNIVERSITY for 6Yrs (1.4.2008 - 1.4.2014).
- Assistant Professor, SSN College of Engineering for 1.3 years.
- Research Scholar and Teaching Assistant, IIT Madras for 6 years.
- Lecturer, Sriram Engineering College for 2.6 years.

Degree

- ❖ M.E. in POWER SYSTEMS ENGINEERING , THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI KAMARAJ UNIVERSITY (1992 - 1994).
- ❖ B.E. in ELECTRICAL AND ELECTRONICS ENGINEERING , MEPCO SCHLENK ENGINEERING COLLEGE, MADURAI KAMARAJ UNIVERSITY (1988 - 1992).

Research Degree

- ❖ Ph.D. in ELECTRICAL MACHINES from Faculty of ELECTRICAL ENGINEERING, IIT MADRAS, IIT MADRAS (1997 - 2003).
Title: Performance Assessment of Transformers and Induction Motors Using Genetic Algorithm Based Parameter Estimation Methodologies.

Area of Specialisation

- ELECTRICAL MACHINES AND DRIVES; ELECTRICAL VEHICLE TECHNOLOGY; MEMS TECHNOL

Membership in Professional Organization

- Institution of Engineers (FIE)
- The Indian Society of Technical Education (ISTE)
- Institute of Smart Structures and Systems (ISSS)

Research Guidance

Number of Ph.D Scholars Guided	: 3
Number of Ph.D Scholars Guiding	: 5
Number of M.E./ M.Tech. Projects Guided	: 20
Number of Ph.D Scholars Guiding as Joint-Supervisor	: 1

Papers Published in Journals

Research Papers Published in International Journals	: 19
Research Papers Published in National Journals	: 0

1. S.Hosimin Thilagar and G.Sridhara Rao, "Parameter Estimation of Three Winding Transformers Using Genetic Algorithm", Engineering Applications of Artificial Intelligence, published by ELSEVIER (IFAC). Vol. 15, Issue 2, pp. 429 - 437 (2002).
2. S.Hosimin Thilagar and A.R.Kalaiarasi, "Design, Simulation and Analysis of Cantilever Sensor for in-Vitro LDL Detection", Sensors and Transducers, published by International Frequency Sensor Association. Vol. 130, Issue 7, pp. 136 - 141 (2011).

3. A.R.Kalaiarasi and Dr S.Hosimin Thilagar, "Closed Form Models for Pull-in Voltage of Electrostatically Actuated Cantilever Beams and Their Comparative Analysis", Journal of Electrical Engineering, published by Politehnica. Vol. 11, Issue 4, pp. 100-109 (2011).
4. A.R.Kalaiarasi and S.Hosimin Thilagar, " Modeling and Characterisation of a SOIMUMP's Hybrid Electro Thermal Actuator", Microsystem Technologies, published by SPRINGER. Vol. 19, Issue 1, pp. 113 - 120 (2012).
5. A.R.Kalaiarasi and S.Hosimin Thilagar, " Performance Enhancement of Electrostatically Actuated Microgripper with Modified Shape Fingers for Microassembly", Advanced Materials Research, published by Trans Tech Publishers, Switzerland. Vol. 622, Issue 1, pp. 1810 - 1814 (2012).
6. R.Arivalahan, S.Hosimin Thilagar, D.Devaraj, "Investigation of Fuzzy Logic Controller for Conical Tank Process", European Journal of Scientific Research (EJSR), published by EuroJournals Publishing. Vol. 92, Issue 2, pp. 191 - 202 (2012).
7. Immanuel Alphonse, Dr. S. HosiminThilagar, F. Bright Singh, "Design of Solar Powered BLDC Motor Driven Electric Vehicle", INTERNATIONAL JOURNAL of RENEWABLE ENERGY RESEARCH, published by www.ijrer.org. Vol. 2, Issue 3, pp. 456 - 462 (2012).
8. A.R.Kalaiarasi and Dr S.Hosimin Thilagar, " Closed form models for Pull-in Voltage of Electrostatically Actuated Cantilever Beams and Comparative Analysis of Cantilevers and Microgrippers", Journal of Electrical Engineering, published by Slovak Centre of IEE. Vol. 63, Issue 4, pp. 242-248 (2012).
9. S. GANESH KUMAR, S. HOSIMIN THILAGAR, " Implementation of Passivity Based Controller for Buck Converter", European Journal of Scientific Research, published by European Journal of Scientific Research. Vol. 94, Issue 3, pp. 405-413 (2013).
10. S. GANESH KUMAR, S. HOSIMIN THILAGAR, "Passivity Based Control of Luo Converter", JOURNAL OF ELECTRICAL ENGINEERING, published by Politehnica. Vol. 13, Issue 1, pp. 159-166 (2013).
11. S.Ganesh Kumar and S.Hosimin Thilagar, " Load Torque Estimation and Passivity Based Control of Buck Converter", The Mediterranean Journal of Measurements and Control, published by Softmotor Ltd. Vol. 9, Issue 2, pp. 51-57 (2013).
12. Varalakshmi Perumal, Dr S Hosimin Thilagar, "Modeling and Characterization of Piezoelectric MEMS Energy Harvester", International Journal of Computational Engineering Research (IJCER), published by IJCER. Vol. 3, Issue 6, pp. 14-18 (2013).
13. Rajalakshmi PR, Rathna Kann K, Kalaiarasi AR, Hosimin Thilagar S, " Design and Optimisation of an Electro Thermally Actuated Micro Gripper", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), published by IJIRSET. Vol. 3, Issue 3, pp. 417-420 (2014).
14. D.Devaraj and S.Hosimin Thilagar, " An Improved Differential Evolution Algorithm for Congestion Management Considering Voltage Stability", Indian Journal of Science and Technology, published by Informatics Publishing Limited. Vol. 8, Issue 24, pp. 1-9 (2015).

15. S.Ganesh Kumar and S.Hosimin Thilagar, " Sensorless Load Torque Estimation and Passivity Based Control of Buck Converter fed DC Motor", The Scientific World Journal, published by Hindawi Publishing Corporation. Vol. 10, pp. 1-15 (2015).
16. S.Ganesh Kumar and S.Hosimin Thilagar, " Exact Tracking and Error Dynamics and Passive Output Feedback Control of Buck Converter", International Journal of Applied Engineering Research, published by Research India Publications (RIA). Vol. 10, Issue 4, pp. 9789-9798 (2015).
17. KS Gopalakrishnan and S.Hosimin Thilagar, " In-Situ Parameter Estimation of Synchronous Machines Using Genetic Algorithm Method", Power Engineering and Electrical Engineering, published by AEEE. Vol. 14, Issue 3, pp. 254-266 (2016).
18. Suganthi ST, Devaraj D, Ramar K, Hosimin Thilagar S, "An Improved Differential Evolution algorithm for congestion management in the presence of wind turbine generators", Renewable and Sustainable Energy Reviews, ELSEVIER, published by ELSEVIER. Vol. 81, Issue 1, pp. 635 - 642 (2018).
19. V Vidyaa, M Kanthababu, S Hosimin Thilagar, R Balasubramanian, " Evaluation of Macro sized Metal Based Microgrippers for Handling Microcomponents", Precision Engineering, ELSEVIER, published by ELSEVIER. Vol. 54, Issue 10, pp. 403-411 (2018).

Papers Presented in Programmes

Research Papers Presented in International Programmes : 14
Research Papers Presented in National Programmes : 0

1. Dr G Sridhara Rao and S.Hosimin Thilagar, "Parameter Estimation of Double Cage Induction Motor Using Genetic Algorithm" presented in a International level conference on International Conference on Energy, Automation and Information Technology, organised by IIT Kharagpur, INDIA from 10-Dec-2001 to 12-Dec-2001.
2. S.Hosimin Thilagar and G.Sridhara Rao, "In-Situ Determination of Transformer Winding Temperature Rise Using Genetic Algorithm Based Parameter Estimation" presented in a International level conference on International Conference on Electrical and Computer Engineering, Bangladesh University of Engineering and Technology (ICECE 2002), organised by Bangladesh University of Engineering & Technology, Bangladesh from 26-Dec-2002 to 28-Dec-2002.
3. G.Sridhara Rao and S.Hosimin Thilagar, "A Novel Method for the Determination of Stray Load Losses of Induction Motor Using Genetic Algorithm" presented in a International level conference on Canadian Conference on Electrical and Computer Engineering (CCECE 2003), organised by CCECE - IEEE Canada, Canada from 04-May-2003 to 07-May-2003.
4. Dr G Sridhara Rao and S.Hosimin Thilagar, "A Novel Method for In-situ Monitoring of Temperature Rise in Induction Motor Windings" presented in a International level conference on Emerging Trends in Rotating Machines, organised by Indian Electrical & Electronics Manufacturers' Association (IEEMA), INDIA from 13-Dec-2004 to 14-Dec-2004.

5. A.R. Kalaiarasi, S.Hosimin Thilagar, "Design and Analysis of MEMS Gold Coated Cantilever Piezoresistive Sensor for Bio Sensing Applications" presented in a International level conference on Advanced Instrumentation Systems for Industrial Quality Assurance (TIMA 2011), organised by CEERI, MIT-Anna University, International Society of Automation, India from 06-Jan-2011 to 08-Jan-2011.
6. S, GANESH KUMAR, S. HOSIMIN THILAGAR, "Comparative study of Proportional Integral and Passivity Based Control for Buck converter" presented in a International level conference on International Conference on Simulation and Modeling Methodologies, Technologies and Applications, organised by INSTIC, NETHERLANDS from 27-Jul-2011 to 01-Aug-2011.
7. S.Hosimin Thilagar, "Design and Finite Element Analysis of Electrothermal Compliant Microactuators" presented in a International level conference on COMSOL Conference (2011), organised by COMSOL, Bangalore, India from 04-Nov-2011 to 05-Nov-2011.
8. A.R.Kalaiarasi and S.Hosimin Thilagar, "Design and Modeling of Electrostatically Actuated Microgripper" presented in a International level conference on Intl Conference on Mechatronic and Embedded Systems and Applications (MESA 2012), organised by IEEE ASME, China from 08-Jul-2012 to 12-Jul-2012.
9. Arivalahan, R., Hosimin Thilagar, S. and Devaraj, "Development of Genetic Algorithm Tuned PI Controller for Conical Tank Process" presented in a International level conference on IX Control Instrumentation System Conference (CISCON 2012), organised by CISCON, INDIA from 16-Nov-2012 to 17-Nov-2012.
10. S. Ganesh Kumar, S. Hosimin Thilagar, "Soft Sensing of Speed in Load Torque Estimation For Boost Converter-fed DC motor" presented in a International level conference on The 39th Annual Conference of the IEEE Industrial Electronics Society, organised by IEEE-IES, Austria from 10-Nov-2013 to 13-Nov-2013.
11. V. Vidyaa, S. Hosimin Thilagar, M. KanthaBabu, "DESIGN AND DEVELOPMENT OF MICRO-COLLET TO HOLD MICRO CYLINDRICAL COMPONENTS" presented in a International level conference on ISSS International Conference on Smart Materials, Structures and Systems, organised by IISc, Bangalore, India from 08-Jul-2014 to 11-Jul-2014.
12. S.T. Suganthi, D. Devaraj, S. Hosimin Thilagar, "An Improved Differential Evolution Algorithm for Congestion Management Considering Voltage Stability" presented in a International level conference on International Conference on Soft Computing in Applied Sciences&Engineering, (ICSCASE - 2015), organised by Noorul Islam University, INDIA from 23-Jul-2015 to 24-Jul-2015.
13. Dr S Ganeshkumar and Dr S Hosimin Thilagar, "Cost Effective Control of a Partially Flat Boost Converter fed DC Motor" presented in a International level conference on IEEE International Conference on Automatica, IEEEICA/ACCA 2016, organised by Universidad de Talca, Chile, Chile from 19-Oct-2016 to 21-Oct-2016.
14. S.T. Suganthi, D. Devaraj, S. Hosimin Thilagar, "Improved Multi objective Differential Evolution Algorithm for Congestion Management in Restructured Power Systems" presented in a International level conference on IEEE Industrial Electronics and Applications Conference, IEACon 2016, organised by Universiti Teknologi MARA (UiTM), Malaysia from 20-Nov-2016 to 22-Nov-2016.

Current Sponsored Projects

1. "Simulation Analysis and Verification of Performance of Electrical System for Arjun MBT MK-II", funded by CVRDE (June-2017 - December-2019). Project Cost: 2176000.00.

Sponsored Projects Completed

1. "Full Spectrum Simulator - NaMPET", funded by C-DAC, Trivandrum (September-2005 - December-2008). Project Cost: 27.80.
2. "Design and development of micro systems, optimisation of the micro-machining process parameters and micro-tool condition monitoring system.", funded by BRNS (Bhabha Atomic Research Center) (July-2011 - July-2014). Project Cost: 44.41.
3. "Fabrication and characterization of Optimized shape Microgripper with enhanced displacement.", funded by Indian Nanoelectronics Users Programme (INUP), IISc, Bangalore. (December-2012 - June-2013)
4. "National MEMS Design Centre", funded by IISc, Bangalore (August-2009 - May-2013)

Programme Organized

1. Co-author, International level conference on "Intelligent Techniques in Control Optimisation and Signal Processing" .
2. Coordinator, National level Short Course on "Modeling and Analysis of Electrical Machines" from 09-Aug-2007 to 11-Aug-2007.
3. Coordinator, National level Short Course on "Design of Electrical Apparatus" from 19-May-2008 to 25-May-2008.
4. Coordinator, National level workshop on "Workshop and Training on MEMS Design Tools" from 28-Mar-2011 to 31-Mar-2011.

Programme Attended

1. Attended a National level Short Course on "Fundamentals of Nanoscience and Technology" organized by Anna University, India from 18-Jan-2007 to 31-Jan-2007.
2. Participated in a National level workshop on "Sustainable Energy and Sustainable Energy Sources" organized by Anna University, India from 09-Dec-2009 to 11-Dec-2009.
3. Attended a National level Short Course on "Recent Trends in Computer Networks" organized by Anna University, India from 18-Apr-2011 to 30-Apr-2011.
4. Participated in a National level workshop on "INUP Familiarisation Workshop on Nanofabrication Technologies" organized by IISc, Bangalore, India from 16-Apr-2012 to 18-Apr-2012.

5. Attended a National level Short Course on "11th INUP Hands-on Training on MEMS" organized by IISc, Bangalore, India from 18-Jun-2012 to 28-Jun-2012.

Patents

1. Having a patent for "CIRCULAR MICROGRIPPER" awarded by INDIA. Patent number:46734 (04-Mar-2016).

Patents Filed

1. Filed patent rights for MECHANICAL GRIPPERS FOR HANDLING PLURALITY OF MICRin INDIA. File number: 2147483647 Filed Date: 15-Feb-2016.

Experience Abroad

1. Visited IEEE - IECON Soccity, AUSTRIA from 13-Nov-2013 to 16-Nov-2013. Purpose of visit :International Conference.

Extension & Outreach Programme

1. Speaker, EDUSAT Lecture on Electrical Machines -I, participated by Students of Engineering Colleges and funded by Centre for Faculty Development, Anna University at Anna University during 02-Jul-2012 and 30-Nov-2012. No. of participants: 200.