

Name: Dr. S.Senthilkumar

Designation: Assistant Professor  
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**Experience (in years):**                      **Teaching:** 8 years                      **Research: -**                      **Others(if any, specify):**  
Industrial : 10 months

### 1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	PhD	2018	Robotics and Automation
2	M.E	2009	Process Control and Instrumentation
3	M.B.A	2010	General
3	B.E	2006	Electronics and Instrumentation Engineering

### 2. Teaching and Learning:

#### 2.1. Teaching Interests:

- Process Control
- Virtual Instrumentation
- Robotics
- Industrial Instrumentation
- Instrumentation System Design
- Analytical Instrumentation

#### 2.2. Novel Teaching & Learning Techniques adopted:

- Information is correlated to the present trends in the industry
- Discuss with IIT professors and collect the information about the recent trends and deliver to the students.

#### 2.3. Involvement in curriculum updating / Design:

- Collect the information from IIT and NIT professors
- Communicate to industrial people to update the curriculum
- Visit to industries to update the knowledge

### 3. Co-curricular and Extra-Curricular Activities

#### 3.1. Interests and Hobbies:

- Interested in reviewing the research articles related to area of specialization
- Driving
- Reading books

3.2. CCA/ECA Organized :

3.3. CCA/ECA participated :

3.4. Counseling and Mentoring Activity :

3.5. Committees involved in :

Department level :

Institute Level :

4. Conference / Workshop / Seminar / Guest Lectures :

4.1 Conducted : 22

S.No	Name of the Programme	Title of the Programme	Date
1.	National Conference	Innovative Technologies in Electronics and Computer Networking (NCITECN'17)	04.04.17
2.	IEEE sponsored National level workshop	Recent Trends of Nano Technology in Electronics	08.02.16
3.	Technical Seminar	Nuclear power is the need of the hour	13.08.14
4.	Workshop	Basic Electrical, Electronics and Instrumentation	31.07.10
5.	Workshop	Real Time Applications of PLC and DCS	02.09.10
6.	National Level Technical Symposium	INSGLITZ'10	24.09.10
7.	Seminar	Basics of LabVIEW	10.01.11
8.	Guest Lecture	Stability analysis of Control System	11.01.11
9.	Workshop	Recent trends in Virtual instrumentation using LabVIEW	11.03.11
10.	Workshop	Recent trends in Process Control Automation	20.08.11
11.	National Level Tech. Symposium	INSGLITZ'11	21.09.11
12.	Workshop	Embedded system in Industrial Automation	10.01.12
13.	AICTE Sponsord Seminar	Recent trends in Virtual Instrumentation	21.05.12 & 22.05.12
14.	Workshop	Rapid Development of Embedded system using flow code	30.08.12 & 31.08.12
15.	National Level Tech. Symposium	INSGLITZ'12	28.09.12

16.	Workshop	PLC programming and Applications in Process Control	20.02.13
17.	Value added Course	Lab VIEW- Application to Industrial Automation	25.06.13 & 26.06.13
18.	Alumni Interaction	Over View of BIGDATA	02.09.13
19.	Certification Course	Printed Circuit Board Design & Fabrication Process	28.06.13 & 29.06.13
20.	National Level Tech. Symposium	INSGLITZ'13	06.09.12 & 07.09.12
21.	Guest Lecture	Embedded System Applications to modern Industries	08.03.14
22.	Alumni Interaction	What the Industries require?	08.03.14

**4.2 Attended : 12**

#### **Work Shops & Seminars**

- Attended One day workshop on “Ethical Hacking”, 3rd Dec 2015, Conducted by iSYSWAY Technologies, Thanjavur.
- Attended One day workshop on “Environmental Pollution and Control”, 21st November 2015, held at Karpagam College of Engineering, Coimbatore, Tamilnadu.
- Attended One day workshop on “Applications of GIS in Disaster Management”, 20th October 2012, held at KPR Institute of Engineering and Technology, Coimbatore, Tamilnadu.
- Attended technical seminar on “MEMS/ Nano Technology Integration for Bio-Medical Application”, 24th-25th May 2012, held at Muthayammal Engineering College, Rasipuram.
- Attended International Workshop on “Emerging Trends in Technology”, 24th & 25th February 2012 held at Thakur College of Engineering and Technology, Mumbai.
- Attended National Workshop on ‘Industrial Automation’, 7th November 2011 held at Manipal University, Manipal, Karnataka.
- Attended Workshop on ‘RF-Wireless Communication System Design using LabVIEW’ 25th – 26th March 2010, Organized by ICT Academy of Tamilnadu held at Muthayammal Engineering College, Rasipuram, Tamilnadu.
- Attended International Workshop on ‘Development of Technical Education to Meet Millennium Development Goals’ 11th November 2011, Organized by National Institute of Technical Teachers Training and Research (NITTTR) held at Muthayammal Engineering College, Rasipuram, Tamilnadu.
- Attended UGC sponsored short term course on ‘Goal Oriented System Modelling and Identification’ (GOSMI’09), 7th –8th January 2009 held at Annamalai University, Chidambaram.

#### **Faculty Development Programme**

- Attended Staff Development Program on “Multi-Objective optimization techniques for manufacturing processes” 16th– 28th April 2012, held at Muthayammal Engineering College, Rasipuram.

- Attended Staff Development Program on 'LabVIEW with hands on Training' 11th – 15th December 2010 Conducted by ICT Academy of Tamilnadu in Association with National Instruments held at Saveetha Engineering College, Chennai.
- Attended Staff Development Program on 'Emotional Intelligence-A Need for Faculty Members' 10th – 22nd May 2010, held at Muthayammal Engineering College, Rasipuram.

**5. Academic Contribution and Research & Consultancy:**

**5.1. Invited Lectures :01**

- Delivered lecture in National Level One-day Workshop on 'ROBOTICS IN INDUSTRIAL AUTOMATION' held at Karpagam College of Engineering, Coimbatore on 20th November 2015.

**5.2. Articles/Chapters published in Books : Nil**

**5.3. Books published as single author or as editor : Nil**

**5.4. Projects Guided :**

a) UG : 16

b) PG : 10

**5.5. Research Interests : Robotics and Automation, Virtual Instrumentation, Process Control**

**5.6. Ph.D students : Nil**

a) Enrolled : Nil

b) Submitted : Nil

c) Awarded : Nil

**5.7. Papers published in reviewed journals:**

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Citation Index	National/ International
1	Analysis of tunable Fabry-Perot filter in micro electronics using squeezed-film damping method	Asian Journal of Research in social sciences and humanities, Volume 6, issue 09, pp 1296-1312, September 2016	ISSN 2249-7315		International
2	Analysis of Virtual Robot Movements for Performance Improvements in Personal Communication	Wireless Personal Communication, Springer. Volume 90, Number 02, pp 595-608, November 2015,	ISSN: 0929-6212 (Print) 1572-834X (Online)		International

3	Improving the Leg Movement in Locomotion Hexapod Robot for Industrial Automation	International Journal of Advanced Engineering Research. Volume 10, Number 20 (2015) pp 41377-41387	ISSN 0973-4562 (Print) , ISSN 1087-1090 (Online)		International
4	Analysis of Locomotion Versatile Hexapod Robot System For Industrial Automation	International Journal of Engineering Research in Electronics and Communication Engineering, Vol 2, Issue 12, December 2015, pp-19-22	ISSN : 2394-6849		International
5	A Novel dSPACE Based Identification and Control of DC-DC Boost Converter for open loop response using Neuro Controller	CIIT International Journal of Artificial Intelligent Systems and Machine Learning, Vol.3, No.4, April 2011, pp. 242-246	ISSN Number 0974-9667.		International
6	Fuzzy Logic based Robot movement control in Industrial Automation', CIIT International Journal of Fuzzy Systems	CIIT International Journal of Fuzzy Systems, Vol.4, No.7, July 2012, pp.264-267	ISSN Number 0974-9721		International
7	Performance Analysis of Six Leg Locomotion Robot Movement Control',	International Journal of Emerging Technology and Advanced Engineering, Volume 3, Issue 2, Feb 2013, pp. 522-526	ISSN Number 2250-2459.		International
8	Analysis of Squeezed-Film Damping in Tunable Fabry-Perot Filter	International Journal of Research in Electronics and Computer Engineering, Vol.2 Issue 4 Oct-Dec, 2014. Pp.104-108	ISSN: 2393-9028 (PRINT)   ISSN: 2348-2281 (ONLINE).		International

### 5.8. Papers presented at National / International Conferences :

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Analysis of Increasing Energy Conversion Efficiency of Solar Cells Using Quantum Dots	International Conference on Modelling, Simulation and Control (ICMSC '2015) held at Karpagam College of Engineering, Coimbatore, Tamilnadu	International	15th & 16th Oct 2015
2	Improved Security in Smart Cards Using Palm Vein Biometric Crypto System	International Conference on Modelling, Simulation and Control (ICMSC '2015) held at Karpagam College of Engineering, Coimbatore	International	15th & 16th Oct 2015

3	Simulation analysis of torsional vibration analysis and control in an engine using LabVIEW.	International Conference on Electrical, Electronics and Computer Engineering , Tiruchengode, Tamilnadu,	International	11th & 12th March 2015.
4	Performance Analysis Of Multitank Monitoring And Control System For Agri-Management System Using Labview	International Conference on Electrical, Electronics and Computer Engineering , Tiruchengode, Tamilnadu,	International	11th & 12th March 2015.
5	Analysis of Locomotion Versatile Hexapod Robot System using Neuro Controller	International Conference on Electronics and Power Engineering held at Dubai, UAE	International	17th & 18th January 2015.
6	Analysis of Hexapod Robot Movement Control in Various Parameters	International Conference on Interdisciplinary Research and Development held at IMPACT ExhibitionCenter, Muang Thong Thani, Bangkok Metro, Thailand	International	May 31st 2012.
7	Design and Analysis of Robot Movement Control Using Intelligent Controller	International Conference on Computing and Control Engineering, Dr.M.G.R Educational and Research Institute University, Chennai	International	12th & 13th April 2012.
8	Performance and Analysis of MIMO Ball and Beam System using Intelligent Controller	International Conference on Emerging Trends in Technology (ICWET 2012) held at Thakur College of Engineering and Technology, Mumbai,	International	February 24th & 25th 2012
9	Performance Analysis of DC-DC Boost Converter using Intelligent Controller	International Conference on Computer and Automation Engineering (ICCAE 2012) held at Mumbai	International	January 14th - 15th , 2012.
10	Design of fuzzy controller for MIMO Ball and Beam system using LabVIEW	International Conference on Control Instrumentation System Conference (CISCON 2011), Manipal, Karnataka	International	November 03rd - 06th ,2011
11	A Novel dSPACE based Identification and control of DC-DC Boost Converter Using Neural Networks	International Conference on Smart Technologies for Materials, Communication, Controls, Computing and Energy, (ICST 2011) held at VelTechDr.RR&Dr. SR Technical University, Chennai,Tamilnadu,	International	January 05th -07th , 2011
12	Hybrid railway power conditioner with harmonic compensation for highspeed railway	National Conference on "Innovative technologies in Electronics and Computer Networking" NCITECN '17, Kumbakonam	National	04th April 2017.
13	Enhancing the performance of high speed adder circuits by using 180nm CMOS technology	National Conference on "Innovative technologies in Electronics and Computer	National	04th April 2017.

		Networking” NCITECN '17, Kumbakonam		
14	Continuous non invasive technique for measuring blood pressure using impedance plethysmography	National Conference on “Innovative technologies in Electronics and Computer Networking” NCITECN '17, Kumbakonam	National	04th April 2017.
15	Investigation of Drone movement using hand gesture in Surveillance	National Conference on “Innovative technologies in Electronics and Computer Networking” NCITECN '17, Kumbakonam	National	04th April 2017.
16	Analysis of Brain Controlled Artificial Legs For Handicapped Peoples	National Conference on “Trends in Engineering Applications and Management” NCTEAM '15, Erode	National	14th March 2015.
17	A Reduced-Bit Multiplication Algorithm For Digital Arithmetic Based on Vedic Mathematics	National Conference on “Trends in Engineering Applications and Management” NCTEAM '15, Erode	National	14th March 2015.
18	Design of Intelligent Traffic Light Controller Using Embedded System	National Conference on Recent Trends in Communication, Control & Computing Applications, Trichy	National	9th March 2015.
19	Development of Scientific Submarine Cable Network For Next Generation	National Conference on Advances in Management, Engineering and Technology (NCAMET'15), Tirupur	National	6th March 2015
20	Analysis of Ultra-Low Voltage Nano Electronics Powered Directly From A Tree	National Conference on Emerging Trends In Electrical Engineering Applications (NCETEEA 2015), Coimbatore	National	4th March 2015
21	Analysis of Semiconductor Nano Crystals To Photovoltaic Energy Conversion Devices.	National Conference on Sustainable Trends in Energy and Environmental resources (STEER'15), Chennai	National	27th & 28th February 2015.
22	Wireless Charging of Handhelds Using Radio Frequency From NonConventional Energy Resources	National Conference on Emerging Trends in computer communication and informatics (ETCCI'15), Coimbatore	National	23rd & 24th February 2015.
23	Design and Analysis of Versatile Robot system in Nonliner Surface' has been presented in National Conference on Innovative Technologies in Mechanical Engineering (ITME 2013)	National Conference on Innovative Technologies in Mechanical Engineering (ITME 2013), Rasipuram	National	5th April 2013
24	Design of Air pollution Monitoring system using Wireless Sensor Network	National Conference on Emerging Technologies (MKCE-CONFLUENCE'13), Karur	National	27th February 2013
25	Multitank Monitoring and Control System for Automated Agri-	National Conference on Recent Trends in	National	21st February

	Management System	Communication, Computation and VLSI, TIRUPUR		2013.
26	Applications of Hexapod Robot for Industrial Automation	National Conference on Recent Trends in Communication, Computation and VLSI, TIRUPUR	National	21st February 2013.
27	Enrichment of Palmprint Identification Rate Using Multispectral Palmprint Images	National Conference on Recent Trends in Communication, Computation and VLSI, TIRUPUR	National	21st February 2013.
28	LabVIEW based Air Heater Control using PID Controller	National Conference on Control, Communication and System Engineering (CCSE 2012), Coimbatore	National	14th September 2012.
29	A Synchronous Remote accessing control using LabVIEW	National Conference on Recent Trends in Electronics, Instrumentation and Automation (RTEIA 2012), Erode	National	14th March 2012.
30	Performance Analysis of DC-DC Buck converter using Hysteresis Control	National Conference on Emerging Technologies in Electronics and computer Engineering, Erode	National	9th & 10th March 2012
31	Performance Analysis of DC-DC Buck converter using Sliding Mode Control	National Conference on Emerging Technologies (MKCE-CONFLUENCE'12), Karur	National	25th February 2012.
32	Wireless Based Accident Preventing System	National Conference on Communication Convergence (N3C-2K11), Kancheepuram	National	20th August 2011.

#### 5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
	-	-	-	-	-

#### 5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed
	-	-	-	-	-

#### 6. Awards / Honors received:

- Received Best Educator award from International Institute of Organized Research (I2OR)

#### 7. Motto:

To improve research activities, leadership quality and become a role model for others.