Sri Sai Ram Engineering College

Department of Electronics and Instrumentation Engineering

Name: **R.GAYATHIRI**	
Designation:	Associate professor
Qualification:	Ph.D
Area of Specialization:	PROCESS CONTROL AND INSTRUMENTATION
Experience:	Teaching- 18 years
	Industry/Polytechnic: NA
Number of Workshops/ Conferences/ FDP Attended:	WORSHOPS-3 FDP-15

Publication:	Journal and IEEE
	     International : 35
	     SCI:01

	Conference:
	     National: -- 1
	     International: 2

General:	College Guest Lecture Coordinator, College special Class coordinator, Sttp Co-coordinator Year coordinator Award coordinator Gate coordinator EAC Coordinator
Staff Achievement	Have won Cash awards for producing 100% results

Experience:

S. No	Name of the Institution	Designation	Department	Period of experience
1.	Sri Sairam Engineering College, West Tambaram,	Asso Professor	Electronics and Instrumentation Engg	(MAY 2013-Till date)
2.	Sri Sairam Engineering College, West Tambaram,	Asst Professor	Electronics and Instrumentation Engg	2010(JULY) - 2011(DEC)
3.	Dayananda Sagar Eng. College Bangalore	Lecturer	Instrumentation Technology	2007(JUNE)- 2010(JUNE)
4	Roever Engg College Perambalur	Lecturer	Electronics and Communication	2005(JUNE)- 2006(DEC)

Theory Subjects Handled:

- Measurements & Instrumentation
- Industrial Instrumentation- I
- Analytical Instrumentation
- Electronics Instrumentation
- Biomedical Instrumentation
- Optical and laser Instrumentation
- Electrical Measurements

- Power plant instrumentation
- Modern electronic Instrumentation
- Basic electronics
- Neural Network & Fuzzy Logic
- Industrial Instrumentation-II
- Digital logic Circuits

UG projects Guided:

S. No	Title of the Project work	Period of Guidance
1	Myocardial analysis by breathalyzer	2022-2025
2	Dual tone multi frequency for home automation	2022-2025
3	Brain Tumor Detection and classification using deep learning	Februaary 2023 to April 2023
4	IOT Based Real Time Water Consumption flow meter	Febrauary 2022 to April 2022
5	Patient Health Monitoring System using IOT	Febrauary 2021 to April 2021
6	Design of a smart alert system for epileptic seizure detection	Febrauary 2020 to April 2020
7	Vehicle ignitionoveride system to avoid drunken drive	February 2019 to April 2019
8	Votometrics	February 2018 to April 2018
9	Edge collapse based dehazing algorithm for visibility restoration real world scenes	February 2018 to April 2018
10	Wearable Real Time Health and Security Monitoring Scheme For Sports Person	February 2017 to April 2017
11	Hand gesture based bore well rescue robot	February 2016to April 2016
12	Fault detection and analysis of high speed bearings in aircraft system	February 2015 to April 2015
13	Train borne automatic track condition monitoring using IMU	February 2015 to April 2015

Workshops Attended:

- Attended Two days National Workshop on "Research Oriented Approaches On Biomedical Image Processing using matlab at Cresent University,Chennai during April 2017

- Attended Two days Workshop on "Emerging Trends and Future Perspective In Image Processing and Computer vision " at SriSairam Engg College Chennai Tamilnadu during January 2017.

- Attended One day workshop on Instrumentation Detail Engineering at Sri Sairam Engg college Chennai Tamilnadu during June 2016.

FDPs/SDPs Attended:

- Attended FDP on AI & Quantum Driven Image Processing: From Theory To Practice during 9 th to 14 th February 2026

- Attended FDP on Introduction to industry 4.O Industrial Internet of things during July -Oct 2024

- Attended FDP on Accridation and outcome based learning during Aug -Oct 2023

- Attended FDP on Recent Innovation in Electrical Electronics, Instrumentation, Automation and teaching Pedagagy by Sri Sairam Engg college Chennai Tamilnadu during 18 th to 30 May 2020

- Attended national level Faculty Development Programme on "Machine Leaarning" Organized by Sri Sairam Engg college Chennai Tamilnadu during NOV 2019.

- Attended national level Faculty Development Programme on "Process control" Organized by Madras Institute of Technology Chennai Tamilnadu during December 2017.
- Attended national level Faculty Development programme on "Teaching Excellence In Engg and Management " Organized by Sri Sairam Engg college Chennai Tamilnadu during June 2016.

- Attended Faculty Development programme on " Lab View Programming" SCSVMV University during October 2013

- **ATAL FDP ATTENDED:**

- Smart Systems & Emerging Technologies in Industry 4.0 (Aug 18-23)2025
- Bioprocessing using AI(7-2-2023-21-2-2023)
- Artificial Intelligence(December 7-11)-2020
- Augmented Reality /Virtual Reality (November 23-27)-2020
- Sensor Technology(September 21-25)-2020
- Robotics(May 25-29)-2020
- smart cities (Jan 5-9)-2021

PATENT FILLED:

- SMART DRIVER GUIDANCE SYSTEM FOR INDIAN ROADS

- INTEGRATED AI -NANOPARTICLE PLATFORM FOR EARLY DTECTION AND TARGETED TREATMENT OF BREAST

- **BOOK CHAPTER :**

- Contributed Book Chapter in Management and Engineering Research Tome

- Contributed Book Chapter Software Robot for Next Generation Industries Using RPA

NATIONAL CONFERENCE

S. No	Title of the paper	Conference Details	Month/Yearof publication
1.	Hand gesture based bore well rescue robot	National Conference "NCRTE 2016", at PB college chennai.	March 2016

INTERNATIONAL CONFERENCE

S. No	Title of the paper	Conference Details	Month/Yearof publication
1	Brain Controlled Car For Disabled Using Artificial Intelligence	International conference at St.Joseph college of Engg	December 2018
2	Votometrics	International conference at panimalar institute of technology at chennai	March 2018
3	Edge collapse based dehazing algorithm for visibility restoration real world scenes	International conference at prince Dr.K.Vasudevan college of engineering and technology at chennai	March 2018
4	Wearable Real Time Health and Security Monitoring Scheme For Sports Person	International Conference at Madha Engg College at Chennai	March 2017
5	Closed loop model for blood glucose regulation system	International conference at C.Abdul hakeem college of Engg and technology at vellore	July 2016
6	Closed loop control for storage tanks in refinerings using IMC Controller tuned with PSO Tech	International conference at C.Abdul Hakeem College of Engg and Technology at Vellore	July 2016

JOURNAL DETAILS

S. No	Title of the paper	Journal Details	Year of publication
1	Closed loop model for blood glucose regulation system using labview	International Journal of Control Theory and Applications ISSN: 09745572	2016
2	Wearable Real Time Health and Security Monitoring Scheme For Sports Person	Journal of Advanced Research in Dynamical and Control Systems, JRDCS ,ISSN 1943-023X	2017
3	Brain Controlled Car For Disabled Using Artificial Intelligence	International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN (P): 2249-6890; ISSN (E): 2249-8001 Vol. 8	2018
4	Votometrics	International Journal of Pure and Applied Mathematics Volume 119 No. 15 2018, 511-517 ISSN: 1314-3395	2018
5	Edge collapse based dehazing algorithm for visibility restoration real world scenes	International Journal of Pure and Applied Mathematics Volume 118 No. 20 2018, 3643-3647 ISSN: 1314-3395	2018
6	Vehicle Ignition override system to avoid drunken drive	International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075,VOLUME-9 ISSUE -	2019
7	A straight forward solution for visually impaired using smart assistive navigation and accessibility system	International Journal of Innovative Technology and Exploring Engineering ISSN: 22783075	2019
8	Glimpse of self driving car	Journal of the Gujarat research society	2019

9	Design of a smart alert system for epileptic seizure detection	Test Engineering Management ISSN 0193-4120 7769-7772	2020
10	Developing a model based on meal-detection in patients for type-1 diabetes using factorial switching Kalman filter	Materials Today: Proceedings Scopus, WOS ISSN: 22147853	2020
11	Hand gesture base bore well rescue robot	Materials Today: Proceedings Scopus, WOS ISSN: 22147853	2020
12	Eye power and pressure detection using MEMS sensor	IMaterials Today: Proceedings ISSN: 22147853	2020
13	M-Health Technology Using IOT	IEEE Explore Digital Library	2021
14	Enhanced Quality Analysis of Fuel Tank Using Pressure Drop Method Using PLC and SCADA	DOI: 10.1109/ICCCT53315.2021.9711908Copy to clipboard	2021
15	Vivoice - Reading Assistant for the Blind using OCR and TTS	DOI: 10.1109/ICCCI54379.2022.9740877	2022
16	Design of a Hybrid Model for Controlling Flow Rate Using Venturimeter	DOI: 10.1109/ICPECTS56089.2022.10046897	2022
17	An Investigation Report on Spoting and Diagnosing Diseases from the Images of Brain by Convolutional Neural Method Using Fusion Support Vector Machine	IEEE Explore Digital Library DOI: 10.1109/ICPECTS56089.2022.10046672	2022
18	Sanitization Using Autonomous Drone	IEEE Explore Digital Library DOI: 10.1109/ICPECTS56089.2022.10047532	2022
19	Brain Tumor Detection Using Soft Computing	IEEE Explore Digital Library DOI: 10.1109/ICPECTS56089.2022.10046992Copy to clipboard	2022
20	Automatic Optimized Voice Based Gender Identification for Speech Recognition	IEEE Explore Digital Library DOI: 10.1109/ICPECTS56089.2022.10047573Copy to clipboard	2022

21	Detection of Parkinson's Disease Using Voice Changes and Hand-tremor	DOI: 10.1109/IC3IOT53935.2022.9767979Copy to clipboard	2022
22	Optimal Energy Efficiency Techniques and Security Enhancement in Wireless Sensor Network Using Machine Learning	IEEE Explore Digital LibraryDOI: 10.1109/ICPECTS56089.2022.10046790	2022
23	Water Purifier with Clogged Copper Filter	DOI: 10.1109/ICCEBS58601.2023.10448715	2023
24	Sustainable Burlap Hygiene Pads	DOI: 10.1109/ICCEBS58601.2023.10449220	2023
25	Myocardial Analysis by Breathalyzer	IEEE Explore Digital Library DOI: 10.1109/ICCEBS58601.2023.10449090	2023
26	Skin Cancer Detection Using Tensor flow Framework	DOI: 10.1109/ICCEBS58601.2023.10449208Copy to clipboard	2023
27	Classifier Based Malware Detection Techniques	DOI: 10.1109/ICCEBS58601.2023.10449235Copy to clipboard	2023
28	Dual Tone Multifrequency for home Automation	IEEE Explore Digital Library DOI: 10.1109/ICCEBS58601.2023.10448694	2023
29	Review on Microaneurysms Detection Using Image Processing	DOI: 10.1109/ICCEBS58601.2023.10448951	2023
30	IoT Based Smart Biometric Safety and Security in Modern Motorbikes	DOI: 10.1109/ICCEBS58601.2023.10449064Copy to clipboard	2023
31	Efficient Medical Image Compression Based on Wavelet Transform and Modified Gray Wolf Optimization	Indonesian Journal of Electrical Engineering and Informatics (IJEEI) ISSN: 20893272	2023
32	IOT based real time water level flow	DOI: 10.1063/5.0173893 AIP Conference Proceedings	2023
33	Smart Sewage Management System	DOI: 10.1109/ICPECTS62210.2024.10780151	2024
34	Electrolyte Enriched IV Bottle	DOI: 10.1109/ICPECTS62210.2024.10780313	2024
35	Wastewater Treatment in Photocatalysis Using Semiconducting Method	DOI: 10.1109/ICCCT63501.2025.11019617	2025

SCI   Journal

S.No	Title	Journal	Year
1	C-SAN Convolutional stacked auto encoder network for brain tumor detection using MRI	Biomedical Signal Processing and Control ISSN: 17468094 DOI: 10.1016/j.bspc.2024.106816	2025