# Sri Sai Ram Engineering College

# Department of Electronics and Instrumentation Engineering

Name: S.PREMALATHA	
Designation:	Associate Professor
Qualification:	M.E
Area of Specialization:	COMPUTER AND COMMUNICATION
Experience:	Teaching- 14.2 yrs
	Industry/Polytechnic: NA
Number of Workshops/ Conferences/ FDP Attended:	WORKSHOPS-10 FDP-15
Publication:	Journal:
	National: 0
	International: 3
	Conference: National: 05
	International: 16
Research Guidance:	Guided 14 UG projects till date.
General:	Secured University Rank I (Gold medal) in P.G.
	Hockey Player (National Level)

Staff Achievement	Achieved 100% results in the following subjects.
	Transducer Engineering
	Industrial Instrumentation – I
	Industrial Instrumentation – II
	Modern electronic Instrumentation
	Power plant Instrumentation
	<ul> <li>Professional ethics in Engg</li> </ul>
	Analytical Instruments
	Principles of Management
	Fiber optics & Laser Instruments

## **Experience:**

S. No	Name of the Institution	Designation	Department	Period of Experience
1.	Sri Sairam Engineering College, West Tambaram, Chennai	Associate professor	Electronics and Instrumentation Engg	(September 2010-till date)

## **Theory Subjects Handled:**

- Transducer Engineering
- Industrial Instrumentation I
- Industrial Instrumentation II
- Modern electronic Instrumentation
- Power plant Instrumentation
- Professional ethics in Engg
- Fiber optics and Laser Instrumentation
- Analytical Instruments
- Principles of Management
- Electrical Measurements
- Embedded Systems
- Computer architecture

## **BOOK CHAPTER:**

• Contributed Book Chapter in Management and Engineering Research Tome.

## **PATENT FILLED:**

- SMART DRIVER GUIDANCE SYSTEM FOR INDIAN ROADS
- A COMPUTER TABLE WITH ADJUSTABLE HEIGHT Design patent

## **NPTEL CERTIFICATES:**

- Ethics in Engineering Practice
- Sensors and actuators

- Fiber optics
- Bio medical signal processing
- Bio medical Nano technology

#### **ATAL FDPS:**

- "Augmented Reality (AR)/ Virtual Reality (VR)" from 2020-11-23 to 2020-11-27 at Guru Nanak Dev Engineering College, Ludhiana.
- "Sensors Technology" from 2020-9-21 to 2020-9-25 at National Institute of Technical Teachers Training and Research Chandigarh.
- "Design thinking" from 2020-12-14 to 2020-12-18 at Graduate School of Management Studies,
- "Bio signal Processing using AI" from 2023-02-02-2023-02-07 to 2023-02-17-2023-02-21 at AGNI COLLEGE OF TECHNOLOGY
- "Artificial Intelligence" from 2020-12-7 to 2020-12-11 at Sri Sairam Engineering College.
- "Artificial Intelligence and Machine Learning for Healthcare" from 13/12/2021 to 17/12/2021 at College of Engineering Pune.

#### **NITTTR Module**

COMPLETED ALL 8 MODULES

# **UG projects Guided:**

S. No	Title of the Project work	Period of Guidance
1.	Identification and Analysis of Oscillations in Control loops	April 2011
2.	Prescription Drug Abuse Control System Using Smart Card	April 2012
3.	Real Time Virtual Dressing Room	April 2013
4.	Vehicular Accident Prevention Using Inter Vehicle Communication	April 2013
5.	Assessing the Performance of Sensors Using PLC and Lab view	April 2013
6.	Smart Eye Using Ultrasonic Sensor in Electrical Vehicle for Differently Able	April 2014
7.	Automatic Park and Retrieve Assist system Control Technology Based on RTOS and Android Smart	April 2015
8.	Assistive Text Reader for Blind People	April 2016
9.	Computer Aided Diagnosis for Breast Cancer	April 2017
10.	Smart Switching Solutions Using Wi-Fi and cloud	April 2018
11.	Automation of Coal Sorting and Metal Detection using PLC and SCADA	April 2019

	Classification Of Skin Lesion And Cancer Using Fast Fuzzy C Means Clustering	April 2019
13.	Discernment Of Cancer In Buccal Cavity	April 2020
14.	Multi-Way Switching System Using IoT	April 2021
15.	A Machine Learning Model For Early Detection Of Oral Cancer	April 2022
16.	An Efficient Detection and Classification of Acute Lymphoblastic Leukemia using CNN models	April 2023

#### **Workshops Attended:**

Attended workshop on "Modern Tools for Intelligent Instruments" conducted by Sathyabama University on 16th &17th Feb 2008.

Attended workshop on "Computer Graphics and Image processing techniques in Medical Imaging "conducted by VIT University on 26<sup>th</sup> &27<sup>th</sup> Feb 2010

Attended Workshop on "Emerging Trends and Future perspective in Image Processing and Computer Vision" conducted by Sri Sairam Engineering college on 4th to 6th Jan 2017.

## FDPs/SDPs Attended:

Attended FDP on" Control system engineering" conducted by Rrase College of Engineering on 8th to 15th December 2014.

Attended FDP on "Teaching Excellence in Engineering & Management Curriculum" conducted by Sri Sairam Institute of Management Studies on 20th & 21st June 2016.

Attended SSTP on "Embedded Controller and Real time Operating system and Wireless Network in Automation" conducted by IIT Madras on 19th to 24th March 2018.

Attended FDP on "Er	nergy Storage and	Conversion	Technologies"	Conducted by	SSN (	College of
Engineering on 15 <sup>th</sup> a	nd 16 <sup>th</sup> November	2018.				

т.		• •			
$\nu_{\rm II}$	h	10	ati	Λn	

## International:

S. No	Paper Title	Journal Details	Publication details (Vol/Edition/Year and month of publication)
1.	Computer Aided Diagnosis For Breast Cancer	International Journal of Science and Innovative Engineering & Technology (IJSIET).	Vol. 3 May issue 2017 ISBN 978-81-904760-9-6
2	"Smart Switching Solutions Using Wi-Fi & Cloud with Onboard Status"	Jour of Adv Research in Dynamical & Control Systems	Vol. 10, 09-Special Issue, 2018 Accepted: Oct 04, 2018
3	"Analysis Of Image Features For Efficient Classification Of Thyroid Diseases"	Test Engineering management	September October 2019 ISSN 0193-4120 pg no 1-08

# **Conference proceedings**

S. No	Title of the paper	Conference Details	Month/Year of publication
1.	"Analysis of image features for classification of Thyroid Diseases"	National Conference on "Embedded, Microwave & Integrated Technologies – EMIT' 10"Conducted by Saveetha Engineering college on 12th March 2010.	March 2010

2.	"Segmentation and Classification of	National Conference on "Signal	March 2010
	Thyroid Diseases using Ultra sound	Processing, Communication and	
	Images"	Networking (NCSCN 2010)	
	images	Conducted by Sri Venkateswara	
		college of Engineering on 30- 31st	
		March 2010	
3.	"Computer Aided Diagnosis For	International Conference on Science	April 2017
	Breast Cancer"	and Innovative Engineering	<b>P</b>
	Breast Carleer	Conducted by Jawahar Engineering	
		College on 2 <sup>nd</sup> April 2017	1 2010
4.	"Smart Switching Solutions Using	National Conference on "Advanced	April 2018
	Wi-Fi & Cloud with Onboard Status"	Signal Processing, Communication &	
		Networking (ASPCN'18) Conducted	
		by PSNA College of Engineering on	
		02.03.18.	
5.	"Segmentation of Skin Lesion and	National Conference on "Smart	April 2019
	Cancer Using Fast Fuzzy C means	Innovations in Communications and	
	Clustering"	Computing (NCSICC'19) Conducted	
		by Sairam Engg college on 05.03.19.	
6.	"Automation of Coal Sorting and	ISSN: 0374-8588	2019
	Metal Detection using PLC and	Volume 21 Issue 17, December	
	SCADA",	2019,UGC JOURNAL,Pages 2026	
	, i	-2031	
7.	"Automatic Detection Of Skin	Ninth National Conference On Recent	April 2020
	Lesion And Cancer"	Advancements in Signal Processing	
		and Communication	
		(NCRASPC – 2020) Conducted by	
		R.M.K Engg college on 17.02.20	
8.	"Discernment Of Cancer In Buccal	8 <sup>th</sup> International conference on	April 2020
	Cavity."	contemporary Engineering and	F
	Cuvily.	Technology conducted by Prince Shri	
		Venkateshwara padmavathy Engg	
		College on 14 <sup>th</sup> and 15 <sup>th</sup> March 2020	
9.	"Segmentation Of Skin Lesion And	-	2020
<i>)</i> .		Solid State Technology, Vol. 63 No. 2s	2020
	Clarterine?	(2020) Pages 4061 – 4069, Publisher	
	Clustering"	http://solidstatetechnology.us/index.ph	
		p/JSST/article/view/3049	
10.	Infection Prevention and Control	2021 4 <sup>th</sup> International Conference on	2021
	Using Self Sterilizing Door Handle	Computing and Communications	
	for Covid"	Technologies (ICCCT),18 February	

		2022,DOI:	
		10.1109/ICCCT53315.2021.9711780,	
		Publisher: IEEE	
11.	Multi-Way Switching System Using	4 <sup>th</sup> International Conference on	2021
11.	IoT"	Computing and Communications	2021
	101	Technologies (ICCCT),18 February	
		2022,DOI:	
		10.1109/ICCCT53315.2021.9711792,	
		Publisher: IEEE	
12.	Comprehensive Review of Early	International Conference on	2022
	Detection of Oral Cancer Using	Communication, Computing and	
	Deep Learning"	Internet of Things, IC3IoT 2022, Year	
	Deep Learning	- 2022 ,DOI:	
		10.1109/IC3IOT53935.2022.9767966.	
		Publisher: IEEE	
13.	Analysis of Mineral Density in Bone	International Conference on	2022
15.	Using Deep Learning and Smart	Communication, Computing and	
	Tracking System"	Internet of Things, IC3IoT 2022, Year	
	Trucking System	-2022,	
		DOI:	
		10.1109/IC3IOT53935.2022.9767963,	
		Publisher: IEEE	
14	Smart Diagnosis of Disease Using	8 <sup>th</sup> International Conference on	2022
	Machine Learning",	Advanced Computing and	
	, ,	Communication Systems	
		(ICACCS),07 June 2022,DOI:	
		10.1109/ICACCS54159.2022.978507	
		1,Publisher: IEEE	
15.	Design of a Hybrid Model for	International Conference on Power,	2022
	Controlling Flow Rate Using	Energy, Control and Transmission	
	Venturimeter	Systems (ICPECTS)	
		DOI: 10.1109/ICPECTS56089.2022	
		8-9 Dec. 2022	
		10.1109/ICPECTS56089.2022.10046	
		897	
16.	An Investigation Report on Spoting	IEEE Explore Digital Library	2022
	and Diagnosing Diseases from the		
	Images of Brain by Convolutional		
	Neural Method Using Fusion Support		
	Vector Machine		

An Efficient Detection and	Publisher: IEEE,16-17 June 2023,	June 2023
Classification of Acute Lymphoblastic	DOI:	
Leukemia using CNN models	10.1109/ICAECA56562.2023.102003	
	18, Published in: 2023 2nd International	
	Conference on Advancements in	
	Electrical, Electronics,	
	Communication, Computing and	
	Automation (ICAECA)	
	Classification of Acute Lymphoblastic	Classification of Acute Lymphoblastic Leukemia using CNN models  10.1109/ICAECA56562.2023.102003 18,Published in: 2023 2 <sup>nd</sup> International Conference on Advancements in Electrical, Electronics, Communication, Computing and