


## Sri Sai Ram Engineering College

### Department of Electronics and Instrumentation Engineering

<b>Name:</b> S.PREMALATHA	
<b>Designation:</b>	Associate Professor
<b>Qualification:</b>	M.E
<b>Area of Specialization:</b>	COMPUTER AND COMMUNICATION
<b>Experience:</b>	Teaching- 14.2 yrs Industry/Polytechnic: NA
<b>Number of Workshops/ Conferences/ FDP Attended:</b>	WORKSHOPS- 10  FDP-15
<b>Publication:</b>	Journal: National: 0 International: 3  Conference: National: 05 International: 16
<b>Research Guidance:</b>	Guided 14 UG projects till date.
<b>General:</b>	<ul style="list-style-type: none"><li>● Secured University Rank I (Gold medal) in P.G.</li><li>● Hockey Player (National Level)</li></ul>
<b>Staff Achievement</b>	Achieved 100% results in the following subjects. <ul style="list-style-type: none"><li>● Transducer Engineering</li><li>● Industrial Instrumentation – I</li><li>● Industrial Instrumentation – II</li><li>● Modern electronic Instrumentation</li><li>● Power plant Instrumentation</li></ul>

	<ul style="list-style-type: none"> <li>● Professional ethics in Engg</li> <li>● Analytical Instruments</li> <li>● Principles of Management</li> <li>● Fiber optics &amp; Laser Instruments</li> </ul>
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**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 16<sup>th</sup> & 17<sup>th</sup> 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 4<sup>th</sup> to 6<sup>th</sup> Jan 2017.

### FDPs/SDPs Attended:

↗ Attended FDP on "Control system engineering" conducted by Rase College of Engineering on 8<sup>th</sup> to 15<sup>th</sup> December 2014.

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

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

↗ Attended FDP on "Energy Storage and Conversion Technologies" Conducted by SSN College of Engineering on 15<sup>th</sup> and 16<sup>th</sup> November 2018.



**Publications:**

**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**

<b>S. No</b>	<b>Title of the paper</b>	<b>Conference Details</b>	<b>Month/Year publication</b>
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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 12 <sup>th</sup> March 2010.	March 2010
2.	“Segmentation and Classification of Thyroid Diseases using Ultra sound Images”	National Conference on “Signal Processing, Communication and Networking (NCSCN 2010) Conducted by Sri Venkateswara college of Engineering on 30-31 <sup>st</sup> March 2010	March 2010
3.	“Computer Aided Diagnosis For Breast Cancer”	International Conference on Science and Innovative Engineering Conducted by Jawahar Engineering College on 2 <sup>nd</sup> April 2017	April 2017
4.	“Smart Switching Solutions Using Wi-Fi & Cloud with Onboard Status”	National Conference on “Advanced Signal Processing, Communication & Networking (ASPCN’18) Conducted by PSNA College of Engineering on 02.03.18.	April 2018
5.	“Segmentation of Skin Lesion and Cancer Using Fast Fuzzy C means Clustering”	National Conference on “Smart Innovations in Communications and Computing (NCSICC’19) Conducted by Sairam Engg college on 05.03.19.	April 2019
6.	“Automation of Coal Sorting and Metal Detection using PLC and SCADA”,	ISSN: 0374-8588 Volume 21 Issue 17, December 2019,UGC JOURNAL,Pages 2026 -2031	2019
7.	“Automatic Detection Of Skin Lesion And Cancer”	Ninth National Conference On Recent Advancements in Signal Processing and Communication (NCRASPC – 2020) Conducted by R.M.K Engg college on 17.02.20	April 2020
8.	“Discernment Of Cancer In Buccal Cavity.”	8 <sup>th</sup> International conference on contemporary Engineering and Technology conducted by Prince	April 2020

		Shri Venkateshwara padmavathy Engg College on 14 <sup>th</sup> and 15 <sup>th</sup> March 2020	
9.	“Segmentation Of Skin Lesion And Cancer Using Fast Fuzzy C Means Clustering”	Solid State Technology, Vol. 63 No. 2s (2020) Pages 4061 – 4069, Publisher <a href="http://solidstatetechnology.us/index.php/JSST/article/view/3049">http://solidstatetechnology.us/ index.php/JSST/article/view/3049</a>	2020
10.	Infection Prevention and Control Using Self Sterilizing Door Handle for Covid”	2021 4 <sup>th</sup> International Conference on Computing and Communications Technologies (ICCCT), 18 February 2022, DOI: 10.1109/ICCCT53315.2021.971178 0, Publisher: IEEE	2021
11.	Multi-Way Switching System Using IoT”	4 <sup>th</sup> International Conference on Computing and Communications Technologies (ICCCT), 18 February 2022, DOI: 10.1109/ICCCT53315.2021.971179 2, Publisher: IEEE	2021
12.	Comprehensive Review of Early Detection of Oral Cancer Using Deep Learning”	International Conference on Communication, Computing and Internet of Things, IC3IoT 2022 , Year – 2022 , DOI: 10.1109/IC3IOT53935.2022.97679 66, Publisher: IEEE	2022
13.	Analysis of Mineral Density in Bone Using Deep Learning and Smart Tracking System”	International Conference on Communication, Computing and Internet of Things, IC3IoT 2022 , Year – 2022, DOI: 10.1109/IC3IOT53935.2022.97679 63, Publisher: IEEE	2022
14..	Smart Diagnosis of Disease Using Machine Learning”,	8 <sup>th</sup> International Conference on Advanced Computing and Communication Systems (ICACCS), 07 June 2022, DOI: 10.1109/ICACCS54159.2022.9785 071, Publisher: IEEE	2022
15.	Design of a Hybrid Model for Controlling Flow Rate Using	International Conference on Power, Energy, Control and Transmission	2022



	Venturimeter	Systems (ICPECTS) DOI: 10.1109/ ICPECTS56089.2022 8-9 Dec. 2022 10.1109/ ICPECTS56089.2022.10046897	
16.	An Investigation Report on Spotting and Diagnosing Diseases from the Images of Brain by Convolutional Neural Method Using Fusion Support Vector Machine	IEEE Explore Digital Library	2022
17.	An Efficient Detection and Classification of Acute Lymphoblastic Leukemia using CNN models	Publisher: IEEE,16-17 June 2023, DOI: 10.1109/ICAECA56562.2023.10200318,Published in: 2023 2 <sup>nd</sup> International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA)	June 2023

