


## Sri Sai Ram Engineering College

### Department of CSE (CYBER SECURITY)

<b>Name: S.PREMALATHA</b>	
<b>Designation:</b>	Associate Professor
<b>Qualification:</b>	M.E
<b>Area of Specialization:</b>	COMPUTER AND COMMUNICATION
<b>Experience:</b>	Teaching- 15.3 yrs
	Industry/Polytechnic: NA
<b>Number of Workshops/ Conferences/ FDP Attended:</b>	WORSHOPS-25 FDP-22
<b>Publication:</b>	<b>Journal:</b> National: 2 International: 3
	<b>Conference:</b> National: 05 International: 35
<b>Research Guidance:</b>	Guided 20 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> <li>● Professional ethics in Engg</li> <li>● Analytical Instruments</li> <li>● Principles of Management</li> <li>● Fiber optics &amp; Laser Instruments</li> </ul>

**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-May 2025)
2.	Sri Sairam Engineering College, West Tambaram, Chennai	Associate professor	CSE - CYBER SECURITY	June 2025 - 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
- Electrical measurements
- Project management and finance
- Universal human values
- Computer networks

**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
- “SMART OIL LEVEL AND CONDITION INDICATING BRAKE LEVER” – Design patent
- IDENTIFYING THERAPEUTIC TARGETS OF LUNG CANCER USING MACHINE LEARNING AND MOLECULAR DOCKING

**NPTEL CERTIFICATES:**

- Ethics in Engineering Practice
- Sensors and actuators
- Fiber optics
- Bio medical signal processing
- Bio medical Nano technology
- Completed DATA SCIENCE DOMAIN

**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 Health care" 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
17.	Skin Cancer Detection Using Tensor flow Framework	April 2024
18.	Portable DC mixer grinder	April 2025

#### **Workshops Attended:**

- ☐ Attended workshop on “Modern Tools for Intelligent Instruments” conducted by Sathyabama University on 16<sup>th</sup>&17<sup>th</sup>Feb2008.
- ☐ Attended workshop-on “Computer Graphics and Image processing techniques Medical Imaging “conducted by VIT University on 26<sup>th</sup>&27<sup>th</sup>Feb2010
- ☐ 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>Jan2017.

#### **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**

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 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 Shri Venkateshwara padmavathy Engg College on 14 <sup>th</sup> and 15 <sup>th</sup> March 2020	April 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	2021

		2022,DOI: 10.1109/ICCCT53315.2021.9711780, Publisher: IEEE	
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/ICCCT53315.2021.9711792, 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/IC3IOT53935.2022.9767966, 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/IC3IOT53935.2022.9767963, 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/ICACCS54159.2022.9785071,Publisher: IEEE	2022
15.	Design of a Hybrid Model for Controlling Flow Rate Using Venturimeter	International Conference on Power, Energy, Control and Transmission Systems (ICPECTS) DOI: 10.1109/ICPECTS56089.2022 8-9 Dec. 2022 10.1109/ICPECTS56089.2022.10046897	2022
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
18.	Smart Safety Device	<b>Published in:</b> 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS) <b>Date of Conference:</b> 14-15 December 2023 <b>Date Added to IEEE Xplore:</b> 19 March 2024 <b>ISBN Information:</b> <b>DOI:</b> 10.1109/ICCEBS58601.2023.10448906 Publisher: IEEE	March 2024
19.	Skin Cancer Detection Using Tensor-flow Framework	<b>Published in:</b> 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS) <b>Date of Conference:</b> 14-15 December 2023 <b>Date Added to IEEE Xplore:</b> 19 March 2024 <b>ISBN Information:</b> <b>DOI:</b> 10.1109/ICCEBS58601.2023.10448906 Publisher: IEEE	March 2024
20.	Sustainable Burlap Hygiene Pads	<b>Published in:</b> 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS) <b>Date of Conference:</b> 14-15 December 2023 <b>Date Added to IEEE Xplore:</b> 19 March 2024 <b>ISBN Information:</b> <b>DOI:</b> 10.1109/ICCEBS58601.2023.10	March 2024



		448906 Publisher: IEEE	
21.	Contact-Less Hand Disinfection Using Arduino and UV Lighting	<b>Published in:</b> 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS) <b>Date of Conference:</b> 14-15 December 2023 <b>Date Added to IEEE Xplore:</b> 19 March 2024 <b>ISBN Information:</b> <b>DOI:</b> 10.1109/ICCEBS58601.2023.10448906 Publisher: IEEE	March 2024
22.	Water Purifier with Clogged Copper Filter	<b>Published in:</b> 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS) <b>Date of Conference:</b> 14-15 December 2023 <b>Date Added to IEEE Xplore:</b> 19 March 2024 <b>ISBN Information:</b> <b>DOI:</b> 10.1109/ICCEBS58601.2023.10448906 Publisher: IEEE	March 2024
23.	Portable DC mixer grinder	<b>Published in:</b> 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS) <b>Date of Conference:</b> 14-15 December 2023 <b>Date Added to IEEE Xplore:</b> 19 March 2024 <b>ISBN Information:</b> <b>DOI:</b> 10.1109/ICCEBS58601.2023.10448906 Publisher: IEEE	March 2024
24.	Biogas Monitoring System	4th International Conference on Power Energy Control and Transmission Systems Harnessing Power and Energy for an Affordable	JUNE 2024

		Electrification of India Icpects 2024, Year 2024 DOI:10.1109/ICPECTS62210.2024.1 0780028	
25.	Smart Sensors for Real-Time Monitoring of Animal Health and Well-Being	4th International Conference on Power Energy Control and Transmission Systems Harnessing Power and Energy for an Affordable Electrification of India Icpects 2024, Year 2024 DOI:10.1109/ICPECTS62210.2024.1 0780247	JUNE 2024
26.	Accident Avoidance and Response System	4th International Conference on Power Energy Control and Transmission Systems Harnessing Power and Energy for an Affordable Electrification of India Icpects 2024, Year 2024 DOI:10.1109/ICPECTS62210.2024.1 0780309	JUNE 2024
27.	IoT Based Accident Response System	4th International Conference on Power Energy Control and Transmission Systems Harnessing Power and Energy for an Affordable Electrification of India Icpects 2024, Year 2024 DOI:10.1109/ICPECTS62210.2024.1 0780300	JUNE 2024
28.	Injection Molding Hot Runner Machine	4th International Conference on Power Energy Control and Transmission Systems Harnessing Power and Energy for an Affordable Electrification of India Icpects 2024, Year 2024 DOI:10.1109/ICPECTS62210.2024.1 0780415	JUNE 2024
29.	Intelligent Waste Disposal: An Iot Enabled Automated System for	4th International Conference on Power Energy Control and	JUNE 2024

	Dumpster Monitoring and Medical Segregation	Transmission Systems Harnessing Power and Energy for an Affordable Electrification of India Icpects 2024, Year 2024 DOI:10.1109/ICPECTS62210.2024.10780351	
30.	Smart Accident Prevention at Hairpin Bends Using Sensor-Based System	4th International Conference on Power Energy Control and Transmission Systems Harnessing Power and Energy for an Affordable Electrification of India Icpects 2024, Year 2024 DOI:10.1109/ICPECTS62210.2024.10780040	JUNE 2024
31.	Wastewater Treatment in Photo catalysis Using Semiconducting Method	2025 International Conference on Computing and Communication Technologies Iccct 2025, Year 2025 DOI:10.1109/ICCCT63501.2025.11019617	JUNE 2025

