

## **B. RAJAPANDIAN**



**SRI SAIRAM ENGINEERING COLLEGE**

**Department of Electronics & Instrumentation Engineering**

**Designation:** Associate Professor

**Qualification :** ME(PhD)

**Area of Specialization :** Power Electronics And Industrial drives

**Experience :**

**Teaching :** UG: 17.8 years -till date

**Industry :** 2.3years

**No. of workshop / Conferences / FDP attended :**

**Patent: 03**

**Journal: 03**

**Workshop:08**

**Conferences:10**

**FDP:12**

**Project Guidance:** Guided 18 UG projects till date

**General :**

**IEEE Senior Member**

Life Member in **ISOI**(Instrument Society Of India)

Life Member in **ISTE**(Indian Society for Technical Education)

**Placement Co-ordinator** :From Jan2009 to till date

**ATAL** Mentor

### **Staff Achievements:**

Received a Best Paper Award “ **Smart Solid and Wet Waste Management System**” in 3rd International Conference on Power, Energy, Control and Transmission Systems, ICPECTS 2022

Produced 100% result in Industrial Instrumentation-II, Control System, Digital logic circuits, Embedded system, Industrial data Networks and Air pollution & control Engg

### **Experience Details:**

#### **Sri Sairam Engineering College**

Associate Professor-from 2017 to till date

} 14.11 years

Assistant Professor- from 2009 to 2017

#### **Sri Krishna Engineering College**

Lecturer – from April 2006 to December 2008 - 2.8 years

#### **Srinar Communications Pvt.Ltd**

Production Engineer October 2003 January2006 - 2.3 years

Theory Subjects Handled:

- Power Electronics
- Control Systems
- Digital logic Circuits

- Circuit theory
- Industrial Electronics
- Measurements and Instrument
- Electrical Circuits
- Electrical Machines
- Electrical Measurements
- Logic & Distributed Control System
- Circuit Theory
- BEIE
- BEEE
- Electromagnetic theory
- Electro Magnetic Field
- Embedded systems
- Applied soft computing
- Industrial Instrumentation-II
- Instrumentation in petrochemical Industries
- Industrial data networks
- Microprocessors and Microcontrollers
- Basic Electrical And Instrumentation Engineering
- Air Pollution & Control Engineering

**UG projects Guided:**

- Animal Wellbeing and Health Monitoring System February 2023-April 2023
- EV smart charging system February 2022-April 2022

- An improved h5 topology with load test on single phase induction motor February 2021-April 2021
- Smart diagnosis of disease using machine learning February 2021- April 2021
- Design and development of high accuracy capacitive sensor and low power embedded system for bearing strength Measurement February 2020- April 2020
- Smart Rescue System for Cab Drivers February 2019-April 2019
- Automatic Smart Tank Cleaning February 2018 to April 2018
- A Novel approach as an aid for blind, deaf and dumb people February 2017 to April 2017
- Performance analysis of wind energy conversion system using current source converter and medium frequency transformer February 2017 to April 2017
- Smart ocean system February 2016 to April 2016
- Smart helmet February 2016 to April 2016
- Maximum power point tracking using incremental conductance technique in solar power applications February 2015 to April 2015
- Smart grid distribution network using wireless communication February 2015to April 2015
- Reliability Modelling of energy efficient wireless sensor networks February 2014 to April 2014
- Automation of cadaver and forensic information management in mortuaries using PLC-SCADA February 2013 to April 2013
- Gesture recognition for physical y challenged using MEMS technology February 2012 to April 2012
- Tuning of controller for a process with large dead-time February 2011 to April 2011

#### **Workshop/Conferences/FDP: (List)**

#### **Workshop:**

<b>Date</b>	<b>Venue</b>	<b>Title</b>	<b>Duration</b>
6.9.2011 & 7.9.2011	Sri Sairam Engineering college	Industrial Automation by Prolific Systems & Tech Pvt Ltd,Chennai	2 days
19.01.12	Sri Sairam Engineering college	Art Of Journal & Thesis Writing	One day
17.02.12&18.02.12	SSN College Of Engg	Lab View and its applications	2 days
28.02.12& 29.02.12	Sri Sairam Engineering college	Microcontroller based embedded system design by Hex source Technologies	2 days
8.1.2013 -10.1.2013	Sri Sairam Engineering college	(Entrepreneurship Summit-2013) Jenius Espirits Devovation vers L'espirit D'enterprise	3 days

23.4.2017	Sathyabama University	Introduction to Research	Oneday
23.7.2018 to 25.7.2018	Sri Sairam Engineering College	Process Automation Using MATLAB conducted by Intellectz Tech 4	3 days
12.11.2018 to 14.11.2018	Sri Sairam Engineering College	Rapid PrototypingIoT & Embedded System Design in Colloboration with M/S Digital Shark Technology Pvt.Ltd, Bengaluru under Texas Instruments University Programme	3 days
28.4.2020 to 22.6.2020	MHRD-IIC	IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs .	During COVID-19 nationwide lockdown.

26.7.2020 &27.7.2020	SRM Institute of Science & Technology(Ramapura m Campus)-EEE DEPT	Online workshop on “Virtual Conduct of Electrical Machines Laboratory”	2 days

### **Conferences & Journal Publications**

#### **CONFERENCES**

Date	Venue	Title	Duration
6.1.2011 to 8.1.2011	CEERI, CSIR Madras complex, Chennai- 600113	(TIMA- 2011)International Conference: Trends in Industrial Measurements &Automation	3 Days
8.10.2013 to 9.10.13	Sri Sairam Engineering College	AICTE Sponsored National seminar on Current trends and future role of renewable energy	2 days

13.3.2014	Sri Sairam Engineering College	(NCICSD-2014) Second National Conference on Intelligent control and system dynamics	One day(Convenor)
30.03.2014	IT society of India	Presented a paper titled on“ Enhancing the reliability of WSN utilizing deterministic pattern based sensor deployments “International conference on Electrical, Electronics and Computer Science(ICEECS2014)	One day
4.5.2017 &5.5.17	St. Peter’s College of Engineering and Technology	Presented a paper titled on-“A novel approach as an aid for blind, deaf and dumb people” IEEE 3 <sup>rd</sup> International Conference(ICSSS-2017) on Sensing, signal processing and security	Two days
21.3.2018 & 22.3.2018	S.A.Engineering College	Presented a paper titled on-“ Automatic Water reading and smart cleaning of water tank” IEEE 7 <sup>th</sup> International	Two Days



		Conference(ICICES-2018) on Informatics & Computing In Engineering Systems)	
12.4.2018 & 13.4.2018	S.A. Engineering College	Presented a paper titled on-“ Geo location based personal guard” IEEE International Conference(ICPHON-2018) on Photonics and High Speed Optical Networks )	Two Days
11.2.2019	R.M.K College of Engineering and Technology, Puduvoyal, Thiruvallur	Presented a paper titled “IRIS Scanned Electronic Voting Machine” in the “Eighth National Conference on Recent Advancements in Signal Processing and Communication (NCRASPC-2019)”	One day
14.3.2019 & 15.3.2019	Jeppiaar Engineering College, Chennai	Presented a paper titled “Smart Dust Bin” in 5 <sup>th</sup> International Conference on Science Technology Engineering & Mathematics (ICONSTEM’19), Probing Artificial Intelligence Techniques & Research in IoT(PATRIOT)	2 days
19.3.19 & 20.3.2019	Dr. M.G.R Educational and Research Institute, Chennai	Smart Rescue System for Cab Drivers and won First prize in TIME-2019- A National Conference on Unmanned Vehicles and Robotics	2 days
2021	Sri Sairam Engineering College	Multi-Way Switching System Using IoT, <i>Proceedings of the 2021 4th International Conference on Computing and Communications Technologies, ICCCT 2021</i>	2 Days

2022	Easwar college of Engineering coimbatore	Design and Analysis of SEPIC Converter Controller with Filter for BLDC Applications, <i>8th International Conference on Advanced Computing and Communication Systems, ICACCS 2022</i>	2 days
2022	Easwar college of Engineering coimbatore	Smart Diagnosis of Disease Using Machine Learning <i>8th International Conference on Advanced Computing and Communication Systems, ICACCS 2022</i>	2 days
2022	Sri Sairam Engineering College	Smart Solid and Wet Waste Management System <i>3rd International Conference on Power, Energy, Control and Transmission Systems, ICPECTS 2022</i>	2 days

### **JOURNAL PUBLICATIONS**

Published a Paper **“Smart dustbin”** in International Journal of Engineering and Advanced Technology(**IJEAT**)

Volume.8 August 2019

**“A research on electronic component wrecker using electro-magnetic pulse (EMP)”** in International Journal of Engineering and Advanced Technology (**IJEAT**)

Volume.8 August 2019

Published a Paper **“Evaluation of DC-DC Converter using Renewable energy Sources”** in International Journal of Power Electronics and Drive Systems (**IJPEDS**)

Vol.11, No.4, December 2020 ,ISSN:2088-8694,DOI”10.11591/ijpeds.v.11,i4.pp51-54

**FDP:**

Date	Venue	Title	Duration
6.9.2008	Karpaga Vinayaga College of Engg &Tech	Power System & Energy Auditing	One Day
April 2009	Sri Sairam Engg College	AICTE Sponsored FDP:Instructional design & delivery	2 days
27.01.2011	Sri Sairam Engg College	Power flow solutions & Demo on CYME Power Engg Software	One day
16.02.12 to 22.02.12	Sri Sairam Engg College	Work life balance for Engg & Management faculty-AICTE Sponsored	One Week
7.03.12	Sri Sairam Engg College	MATLAB applications in Electrical Engg	One day
27.02.2013	Sri Sairam Engg	Applications of FACTS in Power	Oneday

	College	electronics &Power system	
8.12.2014 to 15.12.14	RRASE college of Engineering (center for faculty development-Anna University)	Control system Engineering	One Week
1/6/2015-8/6/2015	Sri Sairam Engineering College	Power Electronics	7 days
20.06.16-27.06.16	Sri Sai Ram Institute of Technology	EE6008-Microcontroller Based System Design	7days
08.11.17-11.11.17	Rajalakshmi Institute of Technology	Basic Electrical. Electronics, Measurement and Instrumentation Engineering.	4 days
3.12.2018 to 15.12.2018	Sri Sairam Engineering College	Transmission & Distribution	Two weeks
27.3.2019 &28.3.2019	Annai Therasa Arts & Science College, Thirukazhukundram	Creative Thinking” conducted by ICT Academy	2 days
14.4.2020 to 18.4.2020	NITTR-CHANDIGARH-ECE DEPT	Faculty Development Programme on Latest Wireless and Computing Technologies	One week

20.4.2020 to 24.4.2020	NITTR-CHANDIGAR H-Curriculum Development Centre Dept	Faculty Development Programme on Neural Network and CNN	One week
18.05.2020 to 22.05.2020	LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING-Andh ra Pradesh-EEE DEPT	Five - Day Online FDP on “Integration of Renewable Energy Systems- Research Tools / Industrial Perspective”	5 days
26.5.2020 TO 30.5.2020	VELTECH HIGHTECH,CHENNA I	5 days FDP on” Emerging trends in Electric Vehicle,Lighting & Automation”	5 days
3.6.2020 to 7.6.2020	VEMU INSTITUTE OF TECHNOLOGY- Andhra Pradesh-EEE DEPT	One Week National Level Online Faculty Development Programme on “Recent Advances In Electrical Engineering (RAEE-2020) ”	One week
4.6.2020 & 5.6.2020	Department of Electronics and Communication Engineering of KPRIET	online FDP on “Internet of Vehicles”	2 days

16.6.2020 to 20.6.2020	R.M.D.ENGINEERING College, Chennai-EIE DEPT	Five days Online FDP on “Insights into cutting Edge Technologies”	5 days
18.6.2020 to 20.6.2020	Sri Sairam Engg College-ECE Dept	Get ready for AI with MATLAB and Simulink	3 days
20.6.2020	ITM Business School, Chennai	Online FDP on “How to use Google class like a Pro”	One day
22.6.2020 to 26.6.2020	Kongunadu College of Engg & Technology-Trichy	Virtual FDP on “Research Opportunities & Challenges of Electrical Engg”	5 days
	Angappa College of Arts & Science-Coimbatore-Internal Quality Assurance Cell,ACAS.	Five Days Faculty Development Programme on “E-Content Development”	5 days
24.6.2020	ITM Business School, Chennai	Management development program on “Improving managerial Effectiveness using coloured brain concept”	One day

13.7.2020 to 18.7.2020	Sathyabama Institute of Science & Technology, Chennai- EEE DEPT	Online Faculty Development Program on Simulation Tools for Power Electronics and Power Systems	6 days
16.7.2020 to 18.7.2020	SSN College of Engg, Chennai-EEE DEPT	National level virtual FDP on” Microgrid: Operatio n & Control”	3 days
20.7.2020 to 24.7.2020	St. JOSEPH'S INSTITUTE OF TECHNOLOGY St. JOSEPH'S GROUP OF INSTITUTIONS OMR, Chennai-119-EEE DEPT	International Online Faculty Development Program on “TRENDS IN ELECTRIC VEHICLES”	5 days

**Online Webinars:**

Date	Venue	Title	Duration
2.5.2020	MHRD-IIC	India First Leadership Talk webinar broadcasted	One day
8.5.2020	Sri Chandrasekaranandh a saraswathiviswa maha	Virtual Assessment program “Research Methodology”	One day(E certificate provided)

	vidyalaya-Kanchipuram		
13.5.2020	MHRD-IIC	Leadership Talk with Shri R Subrahmanyam, IAS (Secretary Ministry of Social Justice & Empowerment)	One day
	ICT ACADEMY-SKY CAMPUS	Season 5 of Skycampus on the theme The Future of Skills - Education, Employment & Entrepreneurship	One day
6.6.2020	R.M.D Engg College-MHRD-IIC	Online webinar on” Contemporary challenges & Issues in IPR in academia & industries under COVID-19	One day
10.6.2020	R.M.D Engg College-MHRD-IIC	Online webinar titled “Patent Act, Drafting, Filing system and challenges in India” .	One day



12.6.2020	ICT Academy-Sky Campus	Insightful Fridays of Skycampus Digital Knowledge Webinar Series on the theme BUILDING A SUSTAINABLE FUTURE Expert Talks & Panel	One day
13.06.2020	MHRD-IIC	Leadership Talk with Shri R Subrahmanyam, IAS (Secretary Ministry of Social Justice & Empowerment)	One day
24.6.2020	Sri Sairam Engg College-MHRD-IIC(R&D)	National webinar on "Research & Innovations in Defense Sectors"	One day
29.6.2020	SRM Valliammai Engg College-chennai	Webinar on "Robotics & its future"	One day
14.12.2020 to 18.12.2020	ATAL FDP	Design Thinking	5 days
21.09.2020 to 25.09.2020	ATAL FDP	IoT	5 days
1.12.2020 to 5.12.2020	ATAL FDP	Power Electronics	5 days

04.10.2021 to 07.10.2021.	Easwari Engg College	IPR	4 days
06.12.2021 to 10.12.2021	NITTTR Chennai	"Arduino Programming using Tinkercad"	One week
1st & 2nd, August, 2022	SSN College Of Engg	Simulation of Power Converters using Matlab – Simulink'	2 days
26th – 29th September, 2022	SSN College Of Engg	'Renewable Energy Systems Laboratory	4 days

#### **Interaction with outside world**

1.presented a lecture on the topic “Networking in GreenIoT” on 18.03.2021 in the AICTE sponsored short term training programme on Green IOT for Smart Environment organized by Department of Computer Science and Engineering of Panimalar Institute of Technology, conducted on 15th March to 20th March 2021