

Dr.Sri Sai Ram Engineering College
Department of Electrical and Electronics Engineering

1. Name : Dr.Rajakumar.P	
2. Designation:	Associate Professor
3. Qualification :	B.E, M.E., Ph.D
4. Area of Specialization :	Power Electronics & Drives, Power Systems, Power Quality
5. Experience :	Teaching : UG: 23 yrs PG : 6 YRS Industry : 6 yrs & 2 Months
6. No. of workshop : FDP attended :	20 25
7. Publication :	Journal National : 3 International : 13 Conference National : 12 International : 20
8. Research Guidance :	40 UG projects and 20 PG Projects guided
9. General :	Two Months underwent training programme, “Design of Photovoltaic based custom power devices” under the scheme “ Mentoring of Engineering Teachers by INAE Fellow ” at IIT Delhi under the supervision of Dr.Sukumar Mishra , Professor / Dept of EEE.
10. Staff Achievements:	SEC: Detail mentioned below Vel Multi-Tech: UG : 3 times cash award received for best Results.

EXPERIENCE:

a) Teaching & Learning

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Sai Ram Engineering College	Associate Prof	1.08.2014	Till date	10	02	0
Sri Sai Ram Engineering College	Assistant Prof	21.01.2011	31.07.2014	3	6	10
GKM College of Engineering & Technology	Sr.Lecturer	29.06.2009	19.01.2011	1	6	20
KCG College of Technology	Sr.Lecturer	23.08.2007	23.06.2009	1	10	0
Vel Multi-Tech (Formerly Vel S.R.S College of Multimedia)	Lecturer	26.05.2003	4.8.2007	4	2	8
Total				21	3	8

b) Industrial

Name of the Organisation	Designation	Nature of Work	Joining Date	Relieving Date	Experience		
					Years	Months	Days
Media Electrical & Electronics Services Pvt Ltd	Sr.Electrical Engineer	Design of Control Panel, Distribution boards	01.12.2001	26.04.2003	1	4	22
Ignition Products (India) Pvt Ltd	Design Engineer	Design of small capacity turbo generator	01.06.1996	18.04.2001	4	11	18
Total					6	2	10

BOOKS PUBLISHED:

Written three monographs for the benefit of students at Vel Multi Tech Engineering College,
 1. Power Electronics: 2. Power System Analysis : 3. Network Analysis and Synthesis.

RESEARCH PUBLICATIONS:

a)Patent:

Sl.No	Details of Publications	Status
1	INTELLIGENT ROBOT FOR GRASS CUTTING USING ANDROID APPLICATION	Published on 30.10.2020
2	AN INTELLIGENT SMART STREET LIGHT SYSTEM WITH SAFETY TECHNOLOGY AND ENVIRONMENT MONITORING	Published on 6.11.2020
3.	DESIGN AND IMPLEMENTATION OF SMART AIR QUALITY DETECTION SYSTEM BASED ON IOT	Published on 7.05.2021
4	BIOMETRIC FINGERPRINT BASED VOTING MACHINE	Published on 25.11.2022

b)International Journal

Sl.No	Details of Publications
1	Chithrakkannan. R, Karthikeyan R., Hariharan Illango, Rajakumar P. , Sumathi.S, “Improving Medical Imaging Diagnostics by Utilizing Compression Techniques and Implementing FPGA Acceleration with Vivado HLS”,International Journal of Intelligent Systems and Applications in Engineering, Vol-12, Issue-21s, PP:1457–1463, April 2024.
2	Rajakumar.P , Raajasekar, Pavithran, Siva, Natarajan.M, “Smart traffic clearance systems for emergency vehicles by using IOT”, AIP Conference Proceedings, Oct '2024.
3	Rajakumar.P. and R.Saravanakumar, ‘Interline Unified Power Quality Conditioner For Enhancing Power Quality Using Fofpid-Based Interleaved Cuk Converter’, International Journal on Recent and Innovation Trends in Computing and Communication 11(9s), 698–705,Aug’2023.
4	Sthitprajna Mishra, Bibhu Prasad Ganthia, Abel Sridharan, Rajakumar. P ,D. Padmapriya, Dr. S. Kaliappan, “Optimization of Load Forecasting in Smart Grid using Artificial Neural Network based NFTOOL and NNTOOL”, Journal of Physics: Conference Series, doi:10.1088/1742-6596/2161/1/012068, Jan’2022.
5	Rajakumar.P , R.Saravanakumar, “ An Investigation of Power Quality Enrichment using UPQC with AI and Swarm Intelligence Methods”, International Journal of Pure and Applied Mathematics”, ISSN: 1311-8080 (printed version); ISSN: 1314-3395 (on-line version), Volume 117 No. 16 2017, pp-705-712, Dec’2017.
6	Rajakumar. P , R.Saravanakumar, R.Thirumalaivasan, “Efficiency Enhancement of PV based Dynamic Voltage Restorer using Zeta converter”, International Journal of Applied Engineering Research, ISSN 0973-4562, vol-10, No-18 , PP-38724-3872, Oct’2015.
7	Rajakumar.P , R.Saravanakumar, “Design of Fuzzy Logic Controller for DSTATCOM”, International Journal on Advanced Materials Research, ISBN 978-3-03835-058-3, vol-905, PP- 401-405, Apr’2014.
8	Rajakumar. P , J.Shankar, R.Saravanakumar, S.B.Sabberwal,“Review on Power Quality Issues”, IRACST – Engineering Science and Technology: An International Journal (ESTIJ), ISSN: 2250-3498, Vol.2, No.1, Feb’2012.

c) International Conference

Sl.No	Details of Publications
1	Rajakumar P. , Tamilselvi M., Sampath K., ...Mathivanan K., Sathishkumar V.E., “AI-Powered Autonomous Robots for Large-Scale Warehouse Cleaning and Maintenance with IoT Integration”, Proceedings of the 2025 11th International Conference on Communication and Signal Processing Iccsp 2025.
2	Rajakumar P. , Vaigundamoorthi M., Prasad E.S., ...Aancy H.M., Kumar N.M., “AI-Controlled Power Converters for Energy Efficiency”, 2025 Global Conference in Emerging Technology Ginotech 2025
3	Rajakumar P. , Suresh K, Yogeswari T, Sathasree M, Divya G, “Street Light Intensity Control”, 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS).
4	K. Suresh, Rajakumar P. , S Murugesan, P. Sivaprakasam, J.Johnsi Rani, “Smart Brain Controlled Prosthetic Arm Using hybrid Binary PSO”, 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS).
5	Rajakumar. P. , K. Suresh, Gokul, Sivaram. B. G, Shivaganesh. S, Uthama Raja. M, “An Artificially Intelligent Battery Management System”, 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS).
6	T. Mangayarkarasi, Rajakumar. P. , Sivabalan. M, Navin Gokul.R “Arduino Based Smart Metering System with Smart 2560” 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS).
7	Rajakumar.P. , Janani E,Pavithra P, SRIMATHI K, “Prevention And Intimation Of Accident Zone Location”, 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Dec '2023.
8	Suresh.K, Rajakumar, P. , Soumya. K, Dakshina.R, “ AireWatch: Futuristic Gas Monitoring ”, 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), March 2024.
9	Rajakumar.P. , MOHAN S, GOKUL J, JANANI E, SRIMATHI K, PAVITHRA P, “INTIMATION OF ACCIDENT ZONE LOCATION”, 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Feb'2023.
10	Rajakumar.P. , Sai Siddhaarth B, Sriram B, Rajasekhar S “AUTOMATION OF ROOM LIGHTING SYSTEM USING ARDUINO AND PIR SENSOR”, 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Feb'2023.
11	Rajakumar.P. , Barath Kanna.C, Archana R, Akshaya.A, Abhinaya.K, Boobalan.M, “AUTOMATION OF ROOM LIGHTING SYSTEM USING ARDUINO AND PIR SENSOR”, 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Feb'2023
12	Rajakumar.P. , K.Suresh, Boobalan.M, Gokul.M, Darunkumar.G, , Archana R, “IoT Based Voice Assistant using Raspberry Pi and Natural Language Processing”, 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Feb'2023

13	Mohan S , Rajkumar.K , Rajakumar.P , Hari Pradosh S M, Gandhi S, Balasakthishwaran M, “ AUTOMATIC SOLAR TRACKING SYSTEM”, 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Feb’2023
14	Rajakumar. P , Puviarasi,S.Singh, “Power Management and Advanced Metering Infrastructure Using Wireless Network in Remote Areas”, First IEEE International Conference on Power, Energy, Control and Transmission(ICPECT’18), DOI: 10.1109/ICPECTS.2018.8521617, at Sri Sairam Engineering College, Chennai, Feb’2018.
15	Rajakumar. P , Dr.R.Saravanakumar, R.Thirumalaivasan, “Power Quality Improvement using photovoltaic based DVR” First IEEE International Conference on Advances in Electrical Engineering (ICAEE’14), DOI:10.1109/ICAEE.2014.6838512 , at VIT University, Vellore, on 9.01.2014.
16	Rajakumar. P , G.Nithya,“Direct Power Control Strategies for 3-matrix Converter Based Upfc”, International Conference on Recent Trends in Electrical Engineering at Adhiparasakthi Engineering College, Feb '2012.
17	Rajakumar. P , B.Mohanapriya, “Hybrid Power System Based Z-Source Inverter”, International Conference on Recent Trends in Electrical Engineering at Adhiparasakthi Engineering College, Feb '2012.
18	Rajakumar. P , A. Manoj Mathew, “ Design And Implementation of DSTATCOM for Fast Load Compensation Of Critical Loads”, International Conference on Computational Intelligence & Advanced Manufacturing Research ICCIAMR 2013, Vol-4, ISBN - 978-81- 924031-7-5, Mar’2013.
19	Rajakumar. P , G.Ramprakash , “Matrix Converter Based Unified Power Quality Conditioner”, International Conference on Computational Intelligence & Advanced Manufacturing Research ICCIAMR 2013, Vol-4, ISBN - 978-81-924031-7-5, Mar’2013.

d) National Journal

Sl.No	Details of Publications
1	Dr. K. Suresh, Sanjeevi Gandhi, Rajakumar.P , Venkatesan.G ,Jeeva.C , “Vehicle Parking System Using Genetic Algorithm and Image Processing”, Journal of Advancement in Electronics Signal Processing, Volume 1, Issue 1, Jan’2024.

e) National Conference

Sl.No	Details of Publications
1.	Rajakumar. P , “Presented a paper titled “Power Quality Improvement Using STATCOM based Cascaded Multilevel Inverter”, National level (ETIPS’08) conference held in Vel Multi-Tech SRS Engineering College, Avadi on 8.08.2008.

1. Professional Membership

SI.No	Details	Status
1	ISTE	Life member
2	IEEE Intelligent Transport System Society (ITSS)	Active
3.	INAENG society of Electrical Engineering	Active
4.	IEEE Power and Energy Society (PES)	Active
5.	IEEE Power Electronics Society (PELS)	Active
6.	IEEE Industrial Electronics Society (IES)	Active
7.	IEEE Industrial Automation Systems (IAS)	Active

2.Awards Received

SI.No	Details
1	Best Mentor (SKILL RACK POINTS AND PLACED IN HIGHER PACKAGE)
2	InSc Awards 2021 for guidance of UG project
3	IEEE Senior member

3.Roles and Responsibility in Sri Sairam Engineering College

SI.No	Details of Responsibility
1	EEE Department Placement Facilitator
2	NAAC 5 th criterion Department coordinator, NBA 9 th Criterion Department coordinator, NIRF
3	Department Salesforce coordinator(2018 onwards)
4	Department Alumni Coordinator (2017 onwards)
5	Acted as EEE board chairman in SEC (2021-2022, 2024-2025)
6	Live-in Lab Department coordinator (2020-2021)
7	Innovation Design Project Coordinator (2022-2023)
8	Project Coordinator(2023-2024)

4. Guest Lecture given

SI.No	Topics	Place
1.	Anna University sponsored FDTP on Electrical Machines-1	Department of Electrical and Electronics Engineering, Valliammai Engineering College, Chennai on 9.05.2019
2.	Anna University sponsored FDTP on Power Electronics DC-DC Converter and its applications.	Department of Electronics and Instrumentation, Sri Sairam Engineering College, Chennai on 4.06.2015.

5. FDP/STTP/QIP attended

Sl.No	Name of the Programme	Topics	Place and date
1.	CDAC, NAMPET sponsored short term course	Power Electronics applications to Smart Grid and integration of Renewable Energy source (PESGRE 2023)	VIT University, Vellore from 27.11.2023 to 1.12.2023
2.	Online FDP	Electric Vehicle Drive Systems	from 27.02.2023 to 4.03.2023 Jerusalem College of Engineering
3.	ISTE sponsored FDP	Renewable Energy Systems	Sri Sairam Engineering College(online mode), from 8.02.2021 to 12.02.2021
4.	AICTE sponsored Six days Online STTP	Mitigation of power quality Issues in Distributed Generation Systems using Custom Power Devices-II	R.M.D. Engineering College, from 17.08.2020 to 24.08.2020.
5.	ATAL FDP	Smart Cities	VIT university, Vellore (Online mode), from 1.02.2021 to 5.02.2021
6.	ATAL FDP	Stress-management	Gauhati University Institute of Science and Technology(online mode), from 21.09.2020 to 25.09.2020.
7.	ATAL FDP	Green Technology & Sustainability Engineering	Aligarh Muslim University (Online mode), from 7.09.2020 to 11.09.2020
8.	ATAL FDP	Advances in Power Electronics for Hybrid Electric Vehicle-2020	NIT, Andhra Pradesh, from 11.12.2020 to 15.12.2020
9.	FDP	Circuit Design using AutoCAD Electrical	ICT Academy(online mode), from 25.01.2021 to 30.01.2021
10.	AICTE Margdarshan scheme sponsored FDP	Emerging Power Conversion Techniques and challenges for Renewable energy and Electric Vehicle Applications	National Institute of Technology, Trichy, from 24.06.2019 to 28.06.2019
11.	National Level FDP	Electrical Simulation Software	Sri Sairam Engineering College, from 06.11.17 to 10.11.17
12.	Anna University	Power Electronics	Sri Sairam Engineering

	sponsored FDTP		College, from 1.06.2015 to 8.06.2015.
13.	Anna University sponsored FDP	Applied Soft Computing / Intelligent Control	SSN College of Engineering, from 11.06.2014 to 18.06.2014.
14.	Anna University sponsored FDP	Flexible AC Transmission Systems	SSN College of Engineering, from 30.05.2013 to 11.06.2013.
15.	AICTE sponsored SDP	Computational Intelligence on Power System Analysis, Control and optimization	Pondicherry Engineering College, from 1.06.2011 to 13.06.2011.
16.	Anna University sponsored FDP	Modern method of Teaching	Vel Hi-Tech College of Engineering.
17	Anna University sponsored FDP	Power Electronics	Easwari Engineering College.
18	Anna University sponsored QIP	Instructional design and delivery	Vel Multi-Tech College of Engineering.

6.Training Program attended

- ❖ Fifteen days Undergone Faculty Industrial Training at **GH Induction India Pvt Ltd**, Thirumudivakkam, Chennai from Jan 2022 to Feb'2022.

7. Certificate Course

Sl.No	Name of the course	Duration
1	Completed “Certificate Program on E-Mobility (Cohort-5)” from IIT Madras	From July 2024 to Feb'2025

8.NPTEL Course completed

Sl.No	Topics	Duration
1.	Enhancing Soft Skills and Personality	From Jan-Nov'2020
2.	Intellectual Property	From Jan-Apr'2021
3	Physics of Renewable Energy Systems	From Jun-Nov'2022
4	Accreditation and Outcome based education	From Jul-Oct'2023
5	Python for Data Science	From Jan-Apr'2024
6	Data Science for Engineers	
7	Introduction to Machine Learning	From Jun-Oct'2024
8	Deep Learning	

9. Workshop Attended

Sl.No	Name of the Programme	Topics	Place
1.	Anna University sponsored Workshop	Electromagnetic Theory Revisited	MIT Campus, Anna University, Chennai
2.	Anna University sponsored Workshop	Digital System Design using VHDL	Vel Hi-Tech College of Engineering.
3.	3 rd National summit on	Sustainable Institute Industry Partnership (SIIP)	IIT Madras Chennai