


Sri Sai Ram Engineering College
Department of Electronics and Instrumentation Engineering

JAYANTHI G	
Designation:	Associate Professor
Qualification:	M.E. (PhD)
Area of Specialization:	Applied Electronics
Experience:	Teaching- 18 years
	Industry/Polytechnic: Nil
Number of Workshops/ Conferences/ FDP Attended:	WORKSHOP:13 FDP- 52 CONFERENCE-16
Publication:	JOURNAL: 11 NATIONAL: 01 INTERNATIONAL: 10
	CONFERENCE:13 NATIONAL: 01 INTERNATIONAL:12
Research Guidance:	Guided more than 30 UG projects till date
General:	* Life Member in ISTE *IEEE Professional society member and member of RAS society, SPS society, PEL society, IMS society and VTS society.
Staff Achievement:	<p>* Topper in “Digital Circuits” 12 weeks online course conducted by NPTEL (Jul-Oct 2019) , “Accreditation and Outcome Based Learning” 8 weeks online course conducted by NPTEL (Aug-Oct 2022), Learning Analytics Tools NPTEL (Jul-Oct 2023), “Innovation, Business Models and Entrepreneurship” NPTEL (Aug-Oct 2025).</p> <p>* Received NPTEL Believer, Enthusiastic, Motivated learner, Evangelist, disciple star, and domain star award from NPTEL</p> <p>* Completed Data Science Domain from NPTEL</p> <p>*Served as the Editor for the book titled Technological Development in Management, Engineering, Arts, and Science, contributing to the curation, review, and refinement of scholarly works to advance knowledge across interdisciplinary domains.</p> <p>* Served as a Reviewer for IEEE conferences, evaluating research papers for technical quality, originality, and relevance, contributing to the advancement of scholarly research and innovation in the field.</p> <p>* Served as a Session Chair for IEEE conference.</p>

	<p>* Submitted UBA proposal 2024 “IoT-based centralized greywater monitoring system”</p> <p>*Submitted EPICS-IEEE proposal 2024 "Automated sericulture incubation system process”</p> <p>* Have handled “ Hands on session - Real time sensor interfacing with CDAC ARM controllers” in a Faculty development program.</p> <p>*Acted as a distinguished speaker during VLSI systems Conclave.</p> <p>* In collaboration with Epical Layouts Private Limited, successfully completed the professional course titled “Very Large-Scale Integrated Circuit Design using EDA Tools”.</p>
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Experience:

S.no	Name of the institution	Designation	Department	Period of experience
1.	SRI KRISHNA ENGG COLLEGE	LECUTER	Electronics & Communication Engineering	11 months (18.6.2007 to 23.5.2008)
2.	SRI SAI RAM ENGINEERING COLLEGE	ASSISTANT PROFESSOR	Instrumentation & Control Engineering	14 yrs 9 months (02.07.2008 to 31.05.2024)
3.	SRI SAI RAM ENGINEERING COLLEGE	ASSOCIATE PROFESSOR	Electronics and Instrumentation	1 yr (till date)

Publication

- ☐ <https://sairam.irins.org/profile/182303>
- ☐ [Profile URL: https://vidwan.inflibnet.ac.in/profile/182303](https://vidwan.inflibnet.ac.in/profile/182303)
- ☐ Scopus Author ID: 57204873105

Journal: 11

National: - 01

1. “**Smart Pacemaker for Heart Transplant Patients**”, Renewable Energy with IoT and Biomedical Applications 978-81-952585-4-3

International: - 10

1. “**Social Distancing Detector And Indicator Using Arduino**”, Ilkogretim Online - Elementary Education Online, 2020; Vol 19 (Issue 3): pp. 4722-4732.
2. “**Computer Based Power Theft Detection And Automated Isolation Scheme**”, Studies in Indian Place Names (UGC Care Journal), Volume-40 Issue-3, Feb-2020.
3. “**Dual Detection of MASTIC Sealant**”, Journal of the Gujarat Research Society, Volume21, Issue-17, Dec-2019.

4. **"Automation using plc and iiot monitoring in jaggery preparation"**, International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-9 Issue-1, Nov-2019.
5. **"Detection of Volatile Organic Compound using Electrochemical Sensor"**, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8 Issue-3, Sept-2019.
6. **"Process automation of demineralization plant using Delta PLC, wonderware intouch and Delta HMI"**, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8 Issue-3, Sept-2019.
7. **"Doctor Assistive System Using Augmented Reality for Critical analysis"**, International Journal of Engineering Research in Computer Science and Engineering (IJERCSE), Volume-6, pp 91-98, Jul-2019.
8. **"Automation in clay processing compact logic PLC and factory talkview studio SCADA"** International Journal Of Pure and Applied Mathematics, Volume 118 NO. 11, 187-193 ISSN: 1314-3395, 2018.
9. **"Methodical Privacy Preservation Proficiency on Medical Records"** International Journal for research in applied science & Engineering Technology (IJRASET), Vol-5, Issue-12, pp.2463-2467, December-2017.
10. **"Fault Tolerant design of a Quadcopter through Run time Transformation"** International Journal for research in applied science & Engineering Technology (IJRASET), Vol-5, Issue-11, pp.2621-2631, November-2017.

Conference Proceeding: 13

National: - 01

1. **"2D Medical Image Compression Using Integer Wavelet Transform"**, National conference at Sri Sai Ram Engg. College Chennai, 2007.

International: -12

1. J. G, G. V S, V. S, S. R, V. M and V. A, **"Smart Assistive E-Vehicle for Enhanced Mobility of Physically Challenged Individuals," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-4, doi: 10.1109/ICPECTS62210.2024.10780131.**
2. J. G and B. S, **"AI Based on Inception v3 Architecture for Fault Diagnosis in paddy crop using image recognition and Transfer Learning," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-5, doi: 10.1109/ICPECTS62210.2024.10780327.**
3. H. R G, G. S, H. G, K. K. B, J. G and B. Umamaheswari, **"Parallel Array of Supercapacitors for Storing and Releasing Energy From Regenerative Braking in**

Electric and Hybrid Vehicles," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-5, doi: 10.1109/ICPECTS62210.2024.10780395

4. **G. Jayanthi, S. Brindha, S. Vijayalakshmi, V. Dharshini, J. Angelin Freeda and S. Sahana, "Tomato Leaf Disease Detection Using Machine Learning," 2024 International Conference on Communication, Computing and Internet of Things (IC3IoT), Chennai, India, 2024, pp. 1-6, doi: 10.1109/IC3IoT60841.2024.10550260.**
5. **G. Jayanthi, W. Nancy, B. Umamaheswari, R. Chithrakkannan, R. Sujith and S. Sathya Prasanna, "Intelligent Agricultural Drones Utilizing Nano-Fertilizer Dispensation for Precision Farming," 2024 International Conference on Communication, Computing and Internet of Things (IC3IoT), Chennai, India, 2024, pp. 1-6, doi: 10.1109/IC3IoT60841.2024.10550299.**
6. **U. B, J. G, K. P, S. R, E. S and U. S, "GSM-Based Gas Efflux Monitoring using MQ-2 Sensors," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-3, doi: 10.1109/ICPECTS56089.2022.10046914.**
7. **"Smart Heart Health Monitoring System Using IoT," 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT), 2022, pp. 1-6, doi: 10.1109/IC3IOT53935.2022.9767940.**
8. **"Wireless Powered Sensor Network Based Covid Dissemination Quantifier," 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT), 2022, pp. 1-4, doi: 10.1109/IC3IOT53935.2022.9768025.**
9. **"Role of sensor technology in liquid level measurement of molten metal", Materials Today: Proceedings, Volume 45, Part 2, 2021, Pages 2524-2527, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.11.126>.**
10. **"Voice-O-Mata Using IOT", IOP Conf. Series: Materials Science and Engineering, DOI:10.1088/1757-899X/1084/1/012124, 2021.**
11. **"Smart Monitoring and Control of Water Filtration System Using IOT", 2020 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), 2020, pp. 1-5, doi: 10.1109/ICPECTS49113.2020.9336991.**
12. **G. Jayanthi, S. Arunachalam, K. Praveen and K. P. S. Unni, "Cost Effective SCADA for Remote Monitoring and Control for Effective Process Automation Using HMI," 2018 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2018, pp. 342-346, doi: 10.1109/ICPECTS.2018.8521608.**

Patents Registered/ Awarded:

1. “CAMERA FOR DETECTION OF TRAFFIC SIGNAL VIOLATION”

Design number : **411647-001**
Date of Filing : 26/03/2024
Publication Date : 21/04/2025
Role : Applicant

2. “QR-enabled AYUSH Medicine Dispenser”

Application Number : 2024441075616A
Date of Filing : 07.10.2024
Publication Date : 18.10.2024
Role : Applicant

3. “Wearable IOT enabled Health sensor framework system”

Application Number : 202141056936A
Date of Filing : 08.12.2021
Publication Date : 14.01.2022
Role : Applicant

4. “Frequency Based Insect Repellent System for Agricultural Field”

Application Number : 202041036488A
Date of Filing : 25.08.2020
Publication Date : 04.09.2020
Role : Applicant

Workshops/ Conferences/ FDP Attended

Workshop Attended:

1. Completed Faculty Orientation Program for delivering the **Ignite Entrepreneurship** course conducted by Wadhwani Entrepreneur Network (NEN), Wadhwani Foundation from 23rd May , 2024 to 5th July, 2024.
2. Participated in the online workshop titled “**Emerging Trends in Academic Writing and Publication**” hosted by SHODH, Panjab University, Chandigarh, on January 11,2024.
3. One day workshop on **Analog VLSI Design (AVD-2024)** organized by Research and Innovation Society of ECE, Birla Institute of Technology, Mesra, held on 4.3.24.
4. Successfully completed the Professional course titled “ **Very Large-Scale Integrated Circuit Design using EDA tools**” organized by Epical Layouts Private Limited from Oct 2023 to Feb 2024 (48 hrs).
5. Kalam Program for **IP Literacy and Awareness** from 15th to 23rd Oct 2020 by Ministry of education Innovation Cell AICTE (Online).
6. Five weeks webinar series on “**Recent Trends in Sensors and Automation**” from 6th Jun to 4th July 2020 at SRI RAMAKRISHNA ENGINEERING COLLEGE (Online).

7. Webinar on **AI Applications in Electrical Power Industry** on 23rd Jun 2020 at R.M.D. Engg College (Online).
8. Participated in the 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 from 28th April to 22nd May 2020.
9. Attended online Webinar Skycampus **digital knowledge series** organized by ICT academy Apr-May 2020.
10. Training on **DCS & PLC Overview** by Yokogawa India Ltd from 18th to 22nd Jul 2016.
11. One day Technical seminar **SIEMENS PLC, SCADA and DCS**
12. Seminar on **Automobile electronics – Key enabler of efficiency and safety** organized by MIT Alumni association on 13th Feb 2013 at GRT grand, Chennai.
13. Workshop on **MEMS Technology and Applications** at Rajlakshmi Engineering College.

Conferences Attended:

1. Presented a paper titled “**Parallel Array of Supercapacitors for Storing and Releasing Energy From Regenerative Braking in Electric and Hybrid Vehicles**”, in International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), at Sri Sai Ram Engg. College Chennai, 08-09 October 2024.
2. Presented a paper titled “**AI Based on Inception v3 Architecture for Fault Diagnosis in paddy crop using image recognition and Transfer Learning**”, in International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), at Sri Sai Ram Engg. College Chennai, 08-09 October 2024.
3. Presented a paper titled “**Smart Assistive E-Vehicle for Enhanced Mobility of Physically Challenged Individuals**”, in International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), at Sri Sai Ram Engg. College Chennai, 08-09 October 2024.
4. Presented a paper titled “**Tomato Leaf Disease Detection Using Machine Learning**”, in 2024 International Conference on Communication, Computing and Internet of Things (IC3IoT), at Sri Sai Ram Engg. College Chennai, 17-18 April 2024.
5. Presented a paper titled “**Intelligent Agricultural Drones Utilizing Nano-Fertilizer Dispensation for Precision Farming**”, in 2024 International Conference on Communication, Computing and Internet of Things (IC3IoT), at Sri Sai Ram Engg. College Chennai, 17-18 April 2024.
6. Presented a paper titled “**Low Cost Mobile Inverted Pendulum Using Kalman Filter With Fuzzy Based PID Controller**”, in International Conference on Power, Energy,

Control and Transmission Systems (ICPECTS), at Sri Sai Ram Engg. College Chennai, 8-9 Dec- 2022

7. Presented a paper titled **“GSM-Based Gas Efflux Monitoring using MQ- 2 Sensors”**, in International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), at Sri Sai Ram Engg. College Chennai, 8-9 Dec- 2022
8. Presented a paper titled **“Smart Heart Health Monitoring System Using IoT”**, in the International Conference on Communication, Computing and IoT, at Sri Sairam Engineering College (online), 10-11th March 2022.
9. Presented a paper titled **“Wireless Powered Sensor Network Based COVID Dissemination Quantifier”**, in the International Conference on Communication, Computing and IoT, at Sri Sairam Engineering College (online), 10-11th March 2022.
10. Presented a paper titled **“Voice-O-Mata Using IOT”**, in the 1st International Conference on Circuits, Signals, Systems and Securities (ICSSS 2020), at Bannari Amman Institute of Technology (online), 11-12 Dec- 2020.
11. Presented a paper titled **“Smart Monitoring and Control of Water Filtration System Using IOT”**, in International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), at Sri Sai Ram Engg. College Chennai (online), 9-10 Dec- 2020.
12. Presented a paper titled **“Automation using PLC and IIOT monitoring in jaggery preparation”** in the 2nd International Conference on Innovation and Advanced Multidisciplinary Research (ICIAMR- 2019) – Singapore, 12-13 Oct- 2019.
13. Presented a paper titled **“Comprehensive and Smart Evaluation of Pipeline Leakage detection using IIOT”** in the International Conference on Emerging trends in Computing, Electrical and Electronics (ETCEE'19) at Alpha Engineering College, 17th march 2019.
14. Presented a paper titled **“COST EFFECTIVE PROCESS AUTOMATION USING HMI”** in the International Conference on Power, Energy, Control and Transmission Systems-2018 at Sri Sai Ram Engg. College Chennai, 22-23 Feb 2018.
15. Presented a paper titled **“Automation in clay processing compact logic PLC and factory talkview studio SCADA”** in 4th International conference on Electrical, Electronics, Instrumentation and Computer Communication at Karpagam College of Engineering, 19- 20 Jan -2018.
16. Presented a paper titled **“2D MEDICAL IMAGE COMPRESSION USING INTEGER WAVELET TRANSFORM”** in National conference at Sri Sai Ram Engg. College Chennai, 2007.

FDP Attended:

1. FDP on **“Programming, Data Structures and Algorithms using Python”** 8 weeks online course conducted by NPTEL during Jul to Sep 2024.
2. FDP on **“Introduction To Machine Learning - IITKGP”** 12 weeks online course conducted by NPTEL during Jul to Sep 2024
3. FDP on **Computer Vision”** 12 weeks online course conducted by NPTEL during Jul to Sep 2024
4. FDP on **“Deep Learning”** 12 weeks online course conducted by NPTEL during Jan-Apr 2024.
5. 5 days online FDP on **“Exploring Wearable Tech and AI Innovations for Personalized Healthcare”** from 3.6.2024 to 7.6.2024 conducted by Department of BME, Rajalakshmi Engineering College, Chennai.
6. FDP on **“ Learning Analytics Tools (NPTEL)”** 12 weeks online course conducted by NPTEL during Jul-Oct 2023
7. 2 days FDP on **“APPLICATIONS OF DIGITAL TECHNOLOGIES IN AGRICULTURE”** on 29th and 30th November 2023 at SRM Institute of Science and Technology in association with IEEE Madras Section.
8. FDP on **“Real Time Digital Signal Processing”** 12weeks online course conducted by NPTEL during Jul-Oct 2022.
9. FDP on **“Accreditation and Outcome Based Learning”** 8weeks online course conducted by NPTEL during Aug-Oct 2022.
10. Completed **" Module 3: Communication Skills, Modes and Knowledge Dissemination"** of NITTTR during Apr-May 2022 organized by AICTE.
11. Completed **" Module 2: Professional Ethics and Sustainability"** of NITTTR during Apr-May 2022 organized by AICTE.
12. Completed **" Module 5: Technology Enabled Learning & Life Long"** of NITTTR during Apr-May 2022 organized by AICTE.
13. Completed **" Module 4: Instructional Planning and Delivery"** of NITTTR during Apr-May 2022 organized by AICTE.
14. FDP on **“Introduction to Industry 4.0 and Internet of things”** 12weeks online course conducted by NPTEL during Jan-Apr 2022.
15. FDP on **“Teaching and Learning in Engineering”** 4 weeks online course conducted by NPTEL during Jan-Feb 2022.
16. FDP on **“Effective Engineering in Teaching in Practice”** 4 weeks online course conducted by NPTEL during Jan-Feb 2022.

17. Orientation/Refresher Programme on **"Machine Learning in Biomedical Engineering"** from 1st to 7th Dec 2021 organized by R.M.K Engineering College, AICTE-ISTE.
18. FDP on **"Ethics in Engineering Practice"** 8 weeks online course conducted by NPTEL during Aug-Oct 2021.
19. FDP on **"Patent Drafting for beginners"** 4 weeks online course conducted by NPTEL during Jul-Aug 2021.
20. Completed **"Module 7: Creative Problem Solving, Innovation and Meaningful R&D"** of NITTTR during Aug-Sep 2021 organized by AICTE.
21. FDP on **"Inculcating Universal Human Values in Technical Education"** from 12th to 16th Jul 2021 organized by AICTE
22. FDP on **"Data Science in IOT"** from 21th to 25th Jun 2021 at Kalinga Institute of Industrial Technology. (Online) AICTE-ATAL
23. FDP on **"Online Teaching and Learning Technologies"** from 14th to 18th Jun 2021 at Motilal Nehru National Institute of Technology Allahabad. (Online) AICTE- ATAL
24. FDP on **"AI and IOT-Based Technology for Precision Farming and Smart Agriculture"** from 7th to 11th Jun 2021 at KGiSL Institute of Technology. (Online) AICTE-ATAL
25. FDP on **"Robotics Process Automation"** from 17th to 21th May 2021 at National Institute of Electronics and Information Technology. (Online) AICTE-ATAL
26. Two-week FDP on **"Machine Learning Techniques for imaging and Health Care with Python"** from 18th to 31st Mar-2021 at Sri Sairam Engg College (Online)
27. FDP on **"Modern Pedagogical Techniques for Effective Teaching & Learning"** from 8 to 12 Feb-2021 at NRI Institute of Technology(online) AICTE- ATAL.
28. FDP on **"Internet of Things"** from 21st to 25th Jan 2021 at Siksha O Anusandhan (online) AICTE- ATAL.
29. FDP on **"Emotional Intelligence"** 8 weeks online course conducted by NPTEL during Jan-Mar 2021.
30. STTP on **"Recent Trends in Computational Intelligence for Health Care Monitoring Systems-III"** from 14-19 Dec-2020 at Bannari Amman Institute of Technology (online)
31. FDP on **"Augmented Reality (AR)/ Virtual Reality (VR)"** from 23rd Nov to 27th Nov 2020 at Guru Nanak Dev Engineering College, Ludhiana(online) AICTE- ATAL
32. FDP on **"Internet of Things"** from 7th Sep to 11th Sep 2020 at ATAL, NITTTR, Chennai (Online).
33. FDP on **"Get ready for AI with MATLAB and SIMULINK"** from 18th Jun to 20th Jun 2020 at Sri Sairam Engg College (Online)

34. Two-week FDP- **“Recent Innovations in Electrical, Electronics, Instrumentation, Automation & Teaching Pedagogy”** from 18th to 30th May 2020 at Sri Sairam Engg College (Online).
35. FDP on **“e-Sim”** from 14th to 16th May 2020 at VIT Chennai (online).
36. FDP on **“Internet of Things”** from 10th Apr to 14 Apr 2020 at NITTTR, Chandigarh (Online).
37. FDP on **“Innovation in Teaching Pedagogy”** from 10th to 14th December 2019 at Sri Sairam Engineering college.
38. FDP on **“Accreditation and Outcome based Learning”** 8 weeks online course conducted by NPTEL during Aug-Oct 2019.
39. FDP on **“Process Modelling & Control”** from 11th to 15th June 2019 at Sri Sairam Engineering College.
40. Two days FDP on **“Outcome Based Education”** from 5th to 6th Apr 2019 Conducted by IQAC of Sri Sairam Engineering College.
41. FDP on **“Enhancing soft skills and personality”** 8 weeks online course conducted by NPTEL during Feb –Apr 2019.
42. FDP on **“Teaching Pedagogy”** from 3rd to 7th Dec 2018 at Sri Sairam Engineering College.
43. FDP on **“Introduction to Research”** 8 weeks online course conducted by NPTEL during Aug–Sep 2018.
44. FDTP on **“EE 8251 - Circuit theory”** from 27th Nov 2017 to 3rd Dec 2017 at Jerusalem College of Engineering.
45. FDP on **“Linear Integrated Circuits and Its Applications”** at KCG Engineering College.
46. FDP on **“EI 6602-Process Control”** from 16th to 23rd Dec 2016 at Sri Sairam Engineering College.
47. FDP on **“EC 6703-Embedded and Real Time Systems”** from 6th to 13th Jun 2016 at Sri Sairam Engineering College.
48. FDP on **“Embedded and Real Time System”** at MIT.
49. FDP on **“EC 2354-VLSI design”** from 9th to 15th Dec 2013 at MIT.
50. FDP on **“World Class Higher Learning Institutions and Faculties”** on 12th Dec 2012 at Sri Sairam Engineering College.
51. SDP on **“Mobile Networks”** at Sri Sairam Engineering College 2008.
52. FDP on **“CSIR-Smart Sensors for Industrial Applications – HoTP on MEMS Pro V0.6”** at Sri Sairam Engineering College 2008.