Sri Sai Ram Engineering College

Department of Instrumentation and Control Engineering

Name: G.JAYANTHI Designation:	Assistant Professor		
Qualification:	M.E. (PhD)		
Area of Specialization:	Applied Electronics		
Experience:	Teaching- 15 years 7 months Industry/Polytechnic: Nil		
Number of Workshops/	WORSHOP: 10		
Conferences/ FDP Attended:	FDP- 48		
Comercines, 151 Attended.	CONFERENCE-11		
Publication:	JOURNAL: 10		
	NATIONAL: NIL		
	INTERNATIONAL: 10		
	CONFERENCE:09		
	NATIONAL: 01		
	INTERNATIONAL: 08		
Research Guidance:	Guided more than 30 UG projects till date		
General:	* Website coordinator of the department		
	*Time-table co-ordinator of the		
	department		
	*NAAC-criteria-6 co-ordinator of the		
	department		
	* Department Creative Innovator		
	* Life Member in ISTE		
	*IEEE Professional society member and		
Staff Achievement	member of RAS society . * Topper in " Digital Circuits " 12 weeks		
Jan Achievement	online course conducted by NPTEL		
	(Jul-Oct 2019).		
	* Topper in "Accreditation and Outcome		
	Based Learning " 8 weeks online course		
	conducted by NPTEL (Aug-Oct 2022).		
	* Received NPTEL Beliver and		
	Enthusiastic award from NPTEL		

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 8 months (2.7.2008 till date)

Workshops/ Conferences/ FDP Attended

Workshop Attended:

- Completed Faculty development workshop on "Product Engineering for Real-Life Problems" at IIT Madras Research Park, Chennai from 28th Sep 2022 to 30th Sep 2022.
- **2.** Kalam Program for **IP Literacy and Awareness** from 15th to 23rd Oct 2020 by Ministry of education Innovation Cell AICTE (Online).
- **3.** Five weeks webinar series on "**Recent Trends in Sensors and Automation**" from 6th Jun to 4th July 2020 at SRI RAMAKRISHNA ENGINEERING COLLEGE (Online).
- **4.** Webinar on **AI Applications in Electrical Power Industry** on 23rd Jun 2020 at R.M.D. Engg College (Online).
- 5. 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.
- **6.** Attended online Webinar Skycampus **digital knowledge series** organized by ICT academy Apr-May 2020.
- **7.** Training on **DCS & PLC Overview** by Yokogawa India Ltd from 18th to 22nd Jul 2016.
- 8. One day Technical seminar SIEMENS PLC, SCADA and DCS
- 9. Seminar on Automobile electronics Key enabler of efficiency and safety organized by MIT Alumni association on 13th Feb 2013 at GRT grand, Chennai.
- **10.** Workshop on **MEMS Technology and Applications** at Rajlakshmi Engineering College.

Conferences Attended:

- 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
- 2. 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
- **3.** 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.
- **4.** 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.
- **5.** Presented a paper titled "Voice-O-Mata Using IOT", in the 1st International Conference on Circuits, Signals, Systems and Securities (ICCSSS 2020), at Bannari Amman Institute of Technology (online), 11-12 Dec- 2020.
- **6.** 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.
- 7. 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.
- **8.** Presented a paper titled "Comprehensive and Smart Evaluation of Pipeline Leakage detection using HOT" in the International Conference on Emerging trends in Computing, Electrical and Electronics (ETCEE'19) at Alpha Engineering College, 17th march 2019.
- 9. 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.
- **10.** 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.

11. 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.** Completed " **Module 1: Orientation towards technical education and curriculum aspects**" of NITTTR Febuary 2023 organized by AICTE.
- **2.** Completed " **Module 6: Student assessment and evaluation**" of NITTTR Febuary 2023 organized by AICTE.
- **3.** Completed " Module 8: Institutional management and administrative procedures" of NITTTR Febuary 2023 organized by AICTE.
- **4.** FDP on "Real Time Digital Signal Processing" 12weeks online course conducted by NPTEL during Jul-Oct 2022.
- **5.** FDP on "Accreditation and Outcome Based Learning" 8weeks online course conducted by NPTEL during Aug-Oct 2022.
- **6.** Completed " Module 3: Communication Skills, Modes and Knoweldege Dissemination" of NITTTR during Apr-May 2022 organized by AICTE.
- **7.** Completed " **Module 2: Professional Ethics and Sustainability**" of NITTTR during Apr-May 2022 organized by AICTE.
- **8.** Completed " **Module 5: Technology Enabled Learning & Life Long**" of NITTTR during Apr-May 2022 organized by AICTE.
- **9.** Completed " **Module 4: Instructional Planning and Delivery**" of NITTTR during Apr-May 2022 organized by AICTE.
- **10.** FDP on "Introduction to Industry **4.0** and Internet of things" 12weeks online course conducted by NPTEL during Jan-Apr 2022.
- **11.** FDP on "**Teaching and Learning in Engineering**" 4 weeks online course conducted by NPTEL during Jan-Feb 2022.
- **12.** FDP on "Effective Engineering in Teaching in Practice" 4 weeks online course conducted by NPTEL during Jan-Feb 2022.
- **13.** Orientation/Refresher Programme on "Machine Learning in Biomedical Engineering" from 1st to 7th Dec 2021 organized by R.M.K Engineering College, AICTE-ISTE.
- **14.** FDP on "Ethics in Engineering Practice" 8 weeks online course conducted by NPTEL during Aug-Oct 2021.

- **15.** FDP on "Patent Drafting for beginners" 4 weeks online course conducted by NPTEL during Jul-Aug 2021.
- **16.**Completed " Module 7: Creative Problem Solving, Innovation and Meaningful R&D" of NITTTR during Aug-Sep 2021 organized by AICTE.
- **17.** FDP on "Inculcating Universal Human Values in Technical Education" from 12th to 16th Jul 2021 organized by AICTE
- **18.** FDP on "**Data Science in IOT**" from 21th to 25th Jun 2021 at Kalinga Institute of Industrial Technology. (Online) AICTE-ATAL
- **19.** FDP on **"Online Teaching and Learning Technologies"** from 14th to 18th Jun 2021 at Motilal Nehru National Institute of Technology Allahabad. (Online) AICTE- ATAL
- **20.** 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
- **21.** FDP on "**Robotics Process Automation**" from 17th to 21th May 2021 at National Institute of Electronics and Information Technology. (Online) AICTE-ATAL
- **22.** Two-week FDP on "Machine Learning Techniques for imaging and Health Care with Python" from 18th to 31st Mar-2021 at at Sri Sairam Engg College (Online)
- **23.** FDP on "Modern Pedagogical Techniques for Effective Teaching & Learning" from 8 to 12 Feb-2021 at NRI Institute of Technology(online) AICTE- ATAL.
- **24.** FDP on "**Internet of Things**" from 21st to 25th Jan 2021 at Siksha O Anusandhan (online) AICTE- ATAL.
- **25.** FDP on "Emotional Intelligence" 8 weeks online course conducted by NPTEL during Jan-Mar 2021.
- **26.** 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)
- **27.** 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
- **28.** FDP on "Internet of Things" from 7th Sep to 11th Sep 2020 at ATAL, NITTTR, Chennai (Online).
- **29.** FDP on "Get ready for AI with MATLAB and SIMULINK" from 18th Jun to 20th jun2020 at Sri Sairam Engg College (Online)
- **30.** Two-week FDP- "Recent Innovations in Electrical, Electronics, Instrumentation, Automation & Teaching Pedagogy" from 18th to 30th may 2020 at Sri Sairam Engg College (Online).
- 31. FDP on "e-Sim" from 14th to 16th May 2020 at VIT Chennai (online).

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

NPTEL Online Certification Course:

- 1. Online Certification Course on Real Time Digital Signal Processing
- 2. Online Certification Course on **Introduction to Industry 4.0 and Internet of things**
- 3. Online Certification Course on Python for Data Science
- 4. Online Certification Course on Education for Sustainable Development(Gold)
- 5. Online Certification Course on Teaching And Learning in Engineering (TALE)

- 6. Online Certification Course on Effective Engineering Teaching In Practice
- 7. Online Certification Course on Ethics in Engineering Practice
- 8. Online Certification Course on Patent Drafting for Beginners
- 9. Online Certification Course on **Emotional Intelligence**
- 10. Online Certification Course on Accreditation and Outcome based Learning (Topper)
- 11. Online Certification Course on **Digital Circuits (Topper)**
- 12. Online Certification Course on Enhancing soft skills and personality
- 13. Online Certification course on Control System
- 14. Online Certification Course on Introduction to research

Completed Online Courses:

- 1. Completed **Udemy 11 hours** course titled "Learn Python language fundamentals in simple way", on 22.09.19.
- **2.** Completed **Udemy 2 hours** course titled "Introduction to IOT using Raspberry Pi", on 21.09.19.
- **3.** Completed **Udemy 11.5 hours** course titled "IOT#4: IOT Automation with Raspberry Pi", on 22.09.19.
- 4. Completed **Skillup Online- Future skills** course titled "Foundational Artificial Intelligence", on 4.03.2020.
- 5. Completed **Simplilearn- Future skills** course titled "Introduction to Artificial Intelligence", on 01.04.2020.
- **6.** Completed Coursera course titled "Building Ardunio Robots and Devices", on 08.05.20.
- 7. Completed Coursera course titled "Internet of things: How did we get there?", on 08.05.20.
- **8.** Completed **Coursera** course titled "Introduction to programming with MATLAB", on 21.05.20.
- **9.** Completed **Coursera** course titled "The Ardunio platform and C Programming", on 20.05.20.
- **10.** Completed **Udemy 23 hours** course titled "Deep learning A-Z hands on Artificial Neural Networks", on 13.05.20.

Workshops Organized:

- 1. Conducted Hands on training "Smart Instrumentation and Embedded Programming" on 28th Dec 2022.
- 2. Conducted Mini Project Exhibition- EXHIBITION-SAI I&C PROYECTO CREATIVO'22 in association with ISTE on 23rd May 2022 for third year students.

- **3.** Conducted **Mini Project Exhibition** in association with ISTE on 15th May 2021 for Second year and third year students.
- **4.** Organized (Coordinator) AICTE sponsored 2 weeks **FDP on "Machine Learning Techniques for Imaging and Healthcare with PYTHON",** Slot I, in Online mode from 28/01/2021 to 10/02/2021.
- 5. Organised 2days Workshop On "Recent Trends and Its Applications Series-1, Sensor Interfacing in LabVIEW" On 17-12-2020 & 18-12-2020
- **6.** Conducted **Mini Project Exhibition** in association with ISTE on 27th February 2019 for third year students.
- 7. Organized (Event Coordinator) 18th ISTE Tamilnadu section Engineering Students Convention on 1st March 2019.
- **8.** Conducted 2 days Value added training programme on "Embedded systems-Arduino Programming" in association with ISA student chapter SEC on 14.8.2018 and 16.8.2018
- 9. In association with IEDC organized 3 days **Entrepreneurship Awareness Camp** (EAC) Supported By EDII, NSTEDB, Govt Of India from 12th Feb to 14th 2018
- 10. Conducted **Mini Project Exhibition** in association with ISTE on 22.04.2016 for third year students.

Publication

- Profile URL: https://vidwan.inflibnet.ac.in/profile/182303
- □ Scopus Author ID: 57204873105

Journal: 10

National: - nil

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.
- "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: 09

National: - 01

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

International: -08

- "Low Cost Mobile Inverted Pendulum Using Kalman Filter with Fuzzy Based PID Controller," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-6, doi: 10.1109/ICPECTS56089.2022.10047593.
- 2. "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.
- 3. "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.

- 4. "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.
- 5. "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.
- 6. **"Voice-O-Mata Using IOT"**, IOP Conf. Series: Materials Science and Engineering, DOI:10.1088/1757-899X/1084/1/012124, 2021.
- 7. "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.
- **8.** "Cost Effective Process Automation Using HMI" in the International Conference on Power, Energy, Control and Transmission Systems-2018 during 22nd & 23rd Feb 2018 at Sri Sai Ram Engg. College Chennai.

Patents Registered/ Awarded:

1. "Wearable IOT enabled Health sensor framework system"

Application Number: 202141056936A

Date of Filing: 08.12.2021

Publication Date: 14.01.2022 Role: Applicant

2. "Frequency Based Insect Repellent System for Agricultural Field"

Application Number: 202041036488A

Date of Filing: 25.08.2020

Publication Date: 04.09.2020 Role: Applicant