Name:	R.CHITRA
Designation:	ASSOCIATE PROFESSOR
Qualification:	ME(PhD)
Area of specialization:	VLSI DESIGN

Experience : (As On Feb 2026)	Industrial Experience	Teaching Experience
	1.11	17.9 years

Number of workshop / FDP attended:	Number of Workshops	Number of FDPs
	16	54

Publications:	Conference		Journal	
	National	International	National	International
	4	**28**	2	**25**

Professional Body Membership:	IAENG - 247049 ISTE - LM131463 IEEE - 98060080 NFISRTMEM0786
Staff Achievements:	Achieved 100% results(8 subjects)

Workshop Details:

Sl. No.	Title	Venue	Month/Year
1.	VLSI DESIGN	Easwari Engineering College	5th October 2006
2.	IC workstation-A Mentor Graphics backend tool	Easwari Engineering College	26th &27th August 2010
3.	MATLAB Interfacing with Arduino	Agni College of Technology	5th March 2016
4.	MATLAB Integration with FPGA in Image processing and Digital Communication	St.Joseph's Institute of Technology	8th -10th November 2017
5.	Industrial IOT	B.S.Abdur Rahman Crescent Institute of Science &Technology	6th & 7th April 2018
6.	Machine Learning & Deep Learning	Anna University-Chennai	8th & 9th February 2019
7.	Intellectual Property Rights & Innovations	Sri Sairam Engineering College	20th July 2019
8.	FPGA Design Flow using Xilinx Vivado	Anna University-Chennai	11th & 12th October 2019
9.	Internet of Things Using Raspberry PI	School of Electrical Engineering, VIT Chennai Campus & Pantech E Learning	2nd -4th October 2020
10.	Technical Writing: Tips, Tricks and tools	JIS University	10.10.2020
11.	ORANGE Data Mining Tool	Sri Sairam Engineering College - Online mode	15th May 2021
12.	Tinker your ideas to the next level	Sri Sairam Engineering College - Online mode	22nd May 2021
13.	Multivariate Analysis through R-Commander	ISAR	27th & 29th August 2021

14.	Engineering Signal Processing and Communication Systems using FPGA (Online-mode)	Madanapalle Institute of Technology and Science	26th & 30th July 2022
15.	VLSI to System Design: Silicon to End Application Approach	ARM Education and ST Microelectronics	31/07/2023 - 04/08/2023
16.	Biosignal Data Acquisition and Processing using LabChart (Bio-DAQ)	Centre for Medical Electronics at College of Engineering Gunidy, Anna university,	14/08/2025

FDP Details:

Sl. No.	Title	Venue	Month/Year
1.	Arduino-Fast Growing Open Source Embedded Protyping Platform	Meenakshi Sundararajan Engineering College	1st April 2011
2.	Digital Signal Processing –EC2361	Madras Institute of Technology	28th Nov – 4th Dec 2011
3.	Embedded Systems with ARM 7 Microcontrollers.	Sri Sairam Engineering College	25th & 26th June 2015
4.	Real Time Embedded System Applications Using ARDUINO and LABVIEW	Agni College of Technology	29th & 30th October 2015
5.	Python Programming	Sri Sairam Engineering College	30th Oct – 6th Nov 2017
6.	Engineering Teaching Pedagogy and Learning Process	Sri Sairam Engineering College	03rd - 07th December 2018
7.	Embedded Systems with Machine Learning	St.Joseph's Institute of Technology	10th - 12th April 2019
8.	Robotics	Sri Sairam Engineering College	13th - 18th May 2019
9.	Study Abroad Opportunities	RMK Engineering College	26th August 2019

10.	Data Acquisition & Signal Processing using LabVIEW	SRM Institute of Science & Technology	25th & 26th November 2019
11.	Advanced Simulation Tools for Electronics Engineers.(Online mode)	S A Engineering College.	27th & 1st May 2020
12.	Recent trends in Information, Computing, Communication and Teaching Methodology competency.(Online mode)	Sri Sairam Engineering College.	4th to 17th May 2020
13.	R Training (Online mode)	Shri Krishnaswamy College for Women	4th May 2020
14.	Artificial Intelligence (Online mode)	KIIT Deemed to be University (ATAL)	15th & 19th Oct 2020
15.	Electrical & Computer Engineering (Online mode)	Indian Institute of Information Technology Kottayam (ATAL)	4th to 8th Nov 2020
16.	Artificial Intelligence	Sri Sairam Engineering College. (ATAL)	7th to 11th Dec 2020
17.	Computer Science & Biology (Online mode)	Lakshmi Narain College of Technology (ATAL)	15th to 19th Dec 2020
18.	FPGA based Digital System Design with HDL (Phase II) (Online mode)	Vel Tech Multi Tech Dr. Rangarajan Dr Saku thala Engineering College, Avadi, Chennai	8th to 13th Feb 2021
19.	Machine Learning Techniques for Imaging and Healthcare with Python(Online mode)	Sri Sairam Engineering College	18th to 31st Mar 2021
20.	Teaching, Learning and Research Pedagogy for Excellence in Education.(Online mode)	Sri Sairam Engineering College	31st May to 14th June 2021
21.	CS 8082 - Machine Learning Techniques	Sri Sairam Engineering	7th to 12th June 2021

		College-ECE(online mode)	
22.	DSP Builder, AI, FPGA Accelerator using Intel FPGA.(Online mode)	School of Electronics Engineering (SENSE) & Centre for Nanoelectronics and VLSI Design at VIT - Chennai	25th & 26th June 2021
23.	Inculcating Universal Human Values in Technical Education	All India Council for Technical Education(AICTE)	12th to 16th July 2021
24.	Research Confront and Document Preparation Using Latex	National Institute of Technolgy Kurukshetra.	2nd to 6th August 2021
25.	Remote Access to Intel FPGAs & SoCs for Embedded System Design	SASTRA Deemed to be University, in association with Intel Technologies Ltd., Bengaluru	11th to 13th Nov 2021
26.	Real Time FPGA Interfacing for Signal and Image Processing Applications using HDL	Vel Tech Rangarajan Dr. sagunthala R&D Institute of Science and Technology. Avadi	20th to 24th Dec 2021
27.	Data Analytics in Healthcare	SSN College of Engineering	17th to 22nd Jan 2022
28.	Artificial Intelligence in Healthcare	Sri Sairam Engineering College	21st to 25th Feb 2022
29.	Recent Trends in Bio - Signal Acquisition and Research Perspectives in Signal Analysis	NSS College of Engineering, Palakkad	25th to 26th March 2022
30.	Deep Learning and its applications	Sri Sairam Engineering College	11th to 15th July 2022

31.	Machine Learning in Healthcare	Sri Sairam Institute of Technology	9th to 13th Jan 2023
32.	UHV-II	All India Council for Technical Education(AICTE)	13th to 18th Feb 2023
33.	Emerging Trends in Biomedical Engineering Research for Healthcare 4.0	Department of Biomedical Engineering-SSN	27th to 29th March 2023
34.	Virtual FDP on "Advances in Signal Processing and its Applications"	SENSE_VIT Chennai	20th to 23rd March 2023
35.	TRICKS AND TECHNIQUES FOR RESEARCH ARTICLE &THESIS WRITING USING MODERN E-TOOLS.	Mechanical engineering Department of Baselios Mathews II College of Engineering and IEI Kollam Local centre	2nd August 2023
36.	Explainable AI for Medical Signal Analysis	SERB sponsored seminar/symposia Department of ECE, National Institute of Technology Puducherry, Karaikal	3rd - 4th March 2024
37.	Applied AI: Practical Implementations	Microsoft India & SAP India under TechSaksham Program	9th Sep 2024 - 13th Sep 2024
38.	"Natural Language Processing with Deep Learning"	Electronics and ICT Academy, NIT Patna & NIT Jamshedpur	24th June, 2025 – 01st July, 2025.
39.	Integrating COMSOL Multiphysics for Innovative Solution	Department of Computer Science and Engineering(Artificial Intelligence & Machine Learning), Sri Sairam Engineering College	7th October 2025 - 8th October 2025

Online Courses Details:

Online Course	SI.No.	Title	Month&Year
NPTEL	1.	Biomedical Signal Processing	Jan-Apr 2019
	2.	Hardware Modelling using Verilog	Aug-Oct 2019
	3.	Introduction to Soft Computing(FDP)	Jan-Mar 2021
	4.	Introduction to Machine Learning(FDP)	July-Sep 2022
	5.	Digital Circuits	July-Oct 2022
	6.	Medical Image Analysis(FDP)	Jan-Feb 2023
	7.	Fundamentals of Artificial Intelligence(FDP)	Jul-Oct 2023
	8.	Design Thinking - A Primer(FDP)	Aug-Sep 2023
	9.	Data Analytics with Python(FDP)	Jan-Apr 2024
	10.	Python for Data Science(FDP)	Jan-Feb 2024
	11.	Microprocessors and Microcontrollers	Jan-Apr 2024
	12.	Microprocessors And Interfacing	Jan-Apr 2024
	13.	Analog Circuits and Systems	July-Sep 2024
	14.	System Design Through Verilog(FDP)	July-Sep 2024
	15.	Deep Learning - IIT Ropar(FDP)	July-Oct 2024
	16.	Learning Analytics Tools(FDP)	July-Oct 2024
	17.	Teaching And Learning in Engineering (TALE)(FDP)	Jan-Feb 2025
	18.	Analog Circuits	Jan-Mar 2025
	19.	Deep Learning	Jan-Apr 2025
	20.	Natural Language Processing(FDP)	Jan-Apr 2025
	21.	Ethics in Engineering Practice	Feb-Apr 2025
	22.	NBA Accreditation and Teaching and	Jan-Apr 2025

		learning in Engineering (NATE)	
	23.	Technical Communication for Engineers (FDP)	Jul-Aug 2025
	24.	Introduction to Operating Systems	Jul-Sep 2025
	25.	Introduction to Internet of Things(FDP)	Jul-Oct 2025
	26.	Patent Drafting for Beginners(FDP)	Jul-Aug 2025
UDEMY	1.	Deep Learning A-Z Hands on Artificial Neural Networks	Noc okv-14 2019
	2.	Deep learning with Keras and Tensorflow in Python and R	April 13 2020
	3.	Support Vector machines in Python – SVM in Python 2019	April 15 2020
COURSERA	1.	Structuring Machine Learning Projects.	May-5 2020
	2.	Introduction to Big Data	May-18 2020
	3.	AI For Everyone	May-31 2020
FUTURE SKILL	1.	Introduction to Robotic Process Automation	April -2 2020
	2.	Introduction to Artificial Intelligence	April -9 2020
ICT	1.	Digital Teaching Techniques - R Systems Women Educators Empowerment Program	2-Feb to 17 Feb 2023

Online Webinar Details:

Sl. No.	Title	Conducted By	Month/Year
1.	Online Teaching and Branding	B.S.Abdur Rahman Crescent Institute of Science &Technology	20th April 2020
2.	The four indispensable soft	Sri Venkateswaraa College of Technology	2nd May 2020

	skills you need to master.		
3.	Online Training on Full Custom and Semi Custom design flow in VLSI using Cadence Tools	B.S.Abdur Rahman Crescent Institute of Science &Technology and Entuple Technologies	29th and 30th April 2021
4.	FPGA FOR Verification	B.S.Abdur Rahman Crescent Institute of Science &Technology	3rd May 2021
5.	Research: Myths & Reality	Genik Research Institute	5th June 2021
6.	SDG 06 Clean Water and Sanitation	IGEN UN SDG Research Conclave G01	28th August 2021
7.	IP Awareness/Training Program	National Intellectual Property Awareness Mission Intellectual Property Office, India	16th March 2023

Publication in Book Chapters:

1. Chitra R, Savithri C N. "Augmented Reality" Management & Engineering Research Tome published by Bonfring Intellectual Integrity, ISBN : 978-93-89515-20-6.

2. Chitra R., Priya E. (March 2021) "Digital Filter Implementation for Removal of Baseline Wander in ECG Signals". In: Komanapalli V.L.N., Sivakumaran N., Hampannavar S. (eds) Advances in Automation, Signal Processing, Instrumentation, and Control. Lecture Notes in Electrical Engineering, vol 700. Springer, Singapore. https://doi.org/10.1007/978-981-15-8221-9_254 (2021)

3. Chitra R., Priya E. (October 2021) 'A Preliminary Step to Realize Digital Filter for Electrocardiogram Signal Denoising'. In: Sivasubramanian, A., Shastry, P.N., Hong, P.C. (eds) Futuristic Communication and Network Technologies. VICFCNT 2020. Lecture Notes in Electrical Engineering, vol 792. Springer, Singapore. https://doi.org/10.1007/978-981-16-4625-6_83

Publication in Journals:

1. Kayalvizhi, S., & Chitra, R. (2010). An Area Efficient Hard Decision Viterbi Decoder for Software Defined Radio Receiver. *Networking and Communication Engineering*, *2*(4).

2. Hariprasad, R., & Chitra, R (2013). "Online Remote Monitoring and Diagnosis of Photovoltaic Plant" IJREAT - International Journal of Research in Engineering and Advanced Technology, Volume 1 Issue 1 March 2013 ISSN:2320-8791.

3. R.Shamli, R. Chitra (2014-March)."Priority based FIFO Network on-Chip Design" IJAIR - International Journal of Advanced and Innovative Research, Volume 3 Issue 3 ISSN:2278-7844.

4. R Chitra, M Ramanan and B Manikandan (2020-Jan)."Braille Based Message Reader for Visually Challenged People" Studies in Indian Place Names - UGC Care Journal, ISSN:2394-3114 Vol. 40 Issue 1 (s1).

5. C.N.Savithri, R.Chitra and K.Jeyapiriya (2020-Aug)."Region - Convolutional Neural Network for the Inspection of Lymphoblastic Cells" International Journal of Future Generation Communication and Networking. ISSN: 2233-7857 IJFGCN.Vol. 13, No. 4, (2020), pp. 3278–3283. http://sersc.org/journals/index.php/IJFGCN/issue/view/296

6. E Priya, R Chitra, P Santhana Krishnan and N. Rakesh (2020-Oct) "Energy Efficient Vital Signal Analyzer" Journal of Green Engineering (JGE), Vol. 10, No. 10, pp. 9971-9980. ISSN: 22454586, 19044720(2020)

7. S. Anitha, M. Divya, S. Janani, V. Sujitha, P.Devipriya G.Divya, S. Ram Dhiwakar R. Chitra and S. Mithileysh (2020-Dec), "Design of Smart Air Purifier Facial Mask" date added to IEEE Xplore Dec 8th. https://doi.org/10.1109/ICSTCEE49637.2020.9277073. pp. 581-584. Electronic ISBN:978-1-7281-7213-2USB ISBN:978-1-7281-7212-5 (2020)

8. Priya, E., & Chitra, R. (2021, December). Smartphone based portable ECG monitoring system. In *2021 4th International Conference on Computing and Communications Technologies (ICCCT)* (pp. 121-126). IEEE.(2022)

9. Chitra, R., Jayapreetha, N., Swetha, S., & Swetha, D. (2022, March). Runout detection in cricket using IOT. In *2022 International Conference on Communication, Computing and Internet of Things (IC3IoT)* (pp. 1-5). IEEE.(2022) https://ieeexplore.ieee.org/document/9767953

10. R Chitra, Jagadeesh U, Shaik Rasool Ahmed, Pravin Kumar G (2022, June) Web Application for Pothole Identification Using VGG16 Architecture in International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211 Volume 10, Issue 6, June-2022, Impact Factor: 7.429, Available online at: https://www.ijaresm.com/web-application-for-pothole-identification-using-vgg-16-architecture

11. Anitha S, Janani S, Nivetha V, Chitra R (Aug-Sep, 2022) Real-Time Parameter Monitoring Of Feeder Pillar Box And Predictive Maintenance in International Journal of Engineering Technology and Management Sciences Website: ijetms.in Issue: 5

Volume No.6 Aug-Sept – 2022 DOI:10.46647/ijetms.2022.v06i05.009 ISSN: 2581-4621

12. Divya Francis, R Chitra, Kasthuri Rengan.P and Sri Vignesh.G (2023-February), "An Extensive Study of Cervical Cancer Detection Methods Using Machine and Deep Learning Approaches," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-5, https://ieeexplore.ieee.org/document/10047277.(2023)

13. R Chitra, Jayapreetha N, Swetha D and Swetha S (2023-March), "Digital Stethoscope for Instant Monitoring for Cardiac Auscultation", 2023 Ninth International Conference on Biosignals, Images and Instrumentation (ICBSII 23) https://ieeexplore.ieee.org/document/10181065. (2023)

14. R. Chitra, S. G. Raghavendra, M. Gowrishankar and K. P. Revanth Reddy, "Solar Based Parking Cum Charging Station for Electric Vehicles," 2023 International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering (RMKMATE), Chennai, India, 2023, pp. 1-6, https://doi.org/10.1109/RMKMATE59243.2023.10369716.(2024)

15. R. Chitra, S. N. Supradha, Durgashree T and Boomika T, "Automatic Flow Control Electrolyte Monitoring System," 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Chennai, India, 2023, pp. 1-5, https://ieeexplore.ieee.org/document/10448644 (2024)

16. R. Chitra, Swetha A, Vishwa M and Hari Haran B, "Enhancing Crop Health Monitoring and Disease Identification in Agriculture," 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Chennai, India, 2023, pp. 1-5, https://ieeexplore.ieee.org/document/10448904 (2024)

17. Chitra, R., Savithri, C. N., Swetha, A., Vishwa, M., & Bhat, P. (2024, October). Connecting Care: An IoT-Based T-Health Monitoring System for Rural India. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)* (pp. 1-4). IEEE. https://ieeexplore.ieee.org/document/10780060

18. Chitra, R., Supradha, S. N., Durgashree, T., & Boomika, T. (2024, October). Smart Light Illumination. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)* (pp. 1-4). IEEE. https://ieeexplore.ieee.org/document/10780323

19. Chitra, R., Savithri, C. N., Vishwa, M., & Bhat, P. (2024, October). Enhancing Efficiency in EV Charging Networks Through Smart Technologies. In *2024 International Conference on Power, Energy, Control and Transmission Systems*

(ICPECTS) (pp. 1-4). IEEE. https://ieeexplore.ieee.org/document/10780227

20. Chitra, R., Udaya, M. R., & Raghul, D. (2024, October). Advancement in Optical Communication: Performance Comparision between Laser and LED Technologies. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)* (pp. 1-4). IEEE. https://ieeexplore.ieee.org/document/10780364

21. Hari haran B., Swetha, A., Chitra, R., & Vishwa, M. (2025, January). Advanced NDRE Techniques for Precision Crop Monitoring and Analysis. In *2025 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS)* (pp. 1-4). IEEE. https://ieeexplore.ieee.org/document/10941496

22. Chitra, R., Kanish, R. B., Varman, R., & Tharunkarthi, G. (2025, April). WasteWise: Smart Incentive-Based Waste Management System using YOLOv8. In *2025 International Conference on Computing and Communication Technologies (ICCCT)* (pp. 1-5). IEEE. https://ieeexplore.ieee.org/abstract/document/11019168

23. Chitra, R., Harshni, A., Deepika, D., & Meena, S. (2025, April). Smart Point-of-Care Respiratory Disease Tracking System. In *2025 International Conference on Computing and Communication Technologies (ICCCT)* (pp. 1-4). IEEE. https://ieeexplore.ieee.org/abstract/document/11019697

24. Chitra, R., Roshhan, R. S., & Rajprasath, S. (2025, April). RF Energy Harvesting for Low-Power Devices. In *2025 International Conference on Computing and Communication Technologies (ICCCT)* (pp. 1-5). IEEE.https://ieeexplore.ieee.org/abstract/document/11018955

Publication in Conferences:

1. Muhammad Mubarak Meeran and R.Chitra (2012-Feb), "Driver - Environment Interaction Based Safety System for Motorcycles", First national Conference on Recent Trends in Information Technology, held in the Department of Information Technology, R.M.K College of Engineering and Technology, 20th February 2012.
2. S. Kayalvizhi and R.Chitra (2012-Feb), "An Area Efficient Hard Decision Viterbi Decoder for Software Defined Radio Receiver", First national Conference on Recent Trends in Information Technology, held in the Department of Information Technology, R.M.K College of Engineering and Technology, 20th February 2012.
3. S. Kayalvizhi and R.Chitra (2012-April), "An Area Efficient Hard Decision Viterbi Decoder for Software Defined Radio Receiver", International Conference on Computation of Power, Energy, Information and Communication, held in Adhiparasakthi Engineering College, 18th &19th April 2012.

4. R. Nivethitha and R.Chitra (2013-Feb), "Design and Simulation of Efficient FFT Algorithm for MIMO OFDM System ", 3rd national Conference on Information and Communication Engineering, held in the Department of Information Technology, R.M.K Engineering College, 25th February 2013.

5. R.Chitra and R. Dhana Sekar (2016-April), "Detecting Trapped Person for the Rescue Operation in Building Collapse", International Conference on Computer Applications 2016 [ICCA], 2nd April 2016.

6. V. Revathi and R.Chitra (2017-Mar), "Detection and Recovery of Faults in FIFO Buffers of NOC Routers", International Conference on Emerging Trends in New & Renewable Energy Sources & Energy Management, held in the Department of Electrical and Electronics Engineering, AarupadaiVeedu Institute of Technology, 23rd and 24th March 2017.

7. P.Santhana Krishnan, N.Rakesh, R.Chitra and E.Priya (2020-Feb), "Vital Signal Analyzer", 2nd International Conference on Communication, Computing and Internet of Things (IC3IoT 2020) held in the Department of ECE, Sri Sairam Engineering College, 20th to 22nd February 2020.

8. M.Ramanan, B. Manikandan and R.Chitra (2020-Feb), "Braille Based Message Reader for Visually Challenged People", 2nd International Conference on Communication, Computing and Internet of Things (IC3IoT 2020) held in the Department of ECE, Sri Sairam Engineering College, 20th to 22nd February 2020.

9. C.N.Savithri, R.Chitra, N. Aishvarya, U. Aishwarya and Amritha Padmakumar (2020-Feb),"Detection of Leukemia in Human Blood Sample Based on Microscopic Images'", 2nd International Conference on Communication, Computing and Internet of Things (IC3IoT 2020) held in the Department of ECE, Sri Sairam Engineering College, 20th to 22nd February 2020.

10. R.Chitra and E.Priya (2020-Feb), "Digital Filter Implementation for Removal of Baseline Wander in ECG signals", International Conference on Automation, Signal Processing, Instrumentation and Control (iCASIC 2020) held on 27th, 28th February at Vellore Institute of Technology, Vellore.

11. S. Anitha, M. Divya, S. Janani, V. Sujitha, P.Devipriya, G.Divya, S. Ram Dhiwakar, R. Chitra and S. Mithileysh (2020-Oct), "Design of Smart Air Purifier Facial Mask", International Conference on Smart Technologies in Computing, Electrical and Electronics (ICSTCEE 2020) held on 9th &10th October at Reva University, Bengaluru.

12. R.Chitra and E.Priya (2020-Nov), "A Preliminary Step to Realise Digital Filter for Electrocardiogram Signal Denoising", Virtual International Conference on Futuristic Communication and Network Technologies (VICFCNT 2020) held on 6th and 7th November at Vellore Institute of Technology, Chennai.

13. S. Anitha, S. Janani, V. Nivetha and R. Chitra (2021-June), "Automatic plant watering system using Arduino and Moisture Sensor", International Conference on Advancements and Recent Trends on Electronics & Communication (ICARTEC 2021) held on 11th June at Meenakshi Sundararajan Engineering College, Chennai.

14. E.Priya and R.Chitra (2021-Dec), "Smartphone Based Portable ECG Monitoring System", 2021 4th International Conference on Computing and Communication Technologies (ICCCT'21) held on 16th and 17th December conducted by Department of Information Technology at Sri Sairam Engineering College, Chennai.

15. R Chitra, Jayapreetha N, Swetha S and Swetha D (2022-March), "Run out Detection in Cricket Using IOT", 2022 International Conference on Communication Computing & Internet of Things (IC3IOT-2022) held on 10th and 11th March conducted by Department of Electronics and Communication Engineering at Sri Sairam Engineering College, Chennai.

16. R Chitra, Praveen Kumar G, Jagadeesh U, Shaik Rasool Ahmed (2022-June), " Web application for pothole identification using VGG 16 Architecture " , International Conference on Innovative Engineering and Technology (ICIET - 2022) held on 1st and 2nd june organized by faculty of Information Technology, Computer Science, Communication and Electrical Engineering in DMI College of Engineering.

17. C N Savithri, R Chitra, Akshaya A, Pradeepa K, Yuvashree k (2022-June), "Pothole Detection using YOLOv4 Model" , International Conference on Bio-Neuro Informatics and Algorithms (ICBNA 2022) held on 21st and 22nd june organized by Symbiosis Institute of Digital and Telecom Management, Computer Science, Communication and Electrical Engineering in DMI College of Engineering.

18. R Chitra, S. Anitha, S. Janani and V. Nivetha (2022-July), "Real Time Parameter Monitoring Of Feeder Pillar Box and Predictive Maintanence", Second International Conference on Modern Computing Trends and Technology (ICMCTT - II) held on 30th and 31st july organized by Kristu Jyoti College of Management and Technology, Kerala, India & RSP Research Hub, Coimbatore, India.

19. Divya Francis, R Chitra, Kasthuri Rengan.P and Sri Vignesh.G (2022-December), "An Extensive Study of Cervical Cancer Detection Methods Using Machine and Deep Learning Approaches", IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS'22) held on 8th and 9th december conducted by Department of Electrical & Electronics Engineering at Sri Sairam Engineering College, Chennai.

20. R Chitra, Jayapreetha N, Swetha D and Swetha S (2023-March), "Digital Stethoscope for Instant Monitoring for Cardiac Auscultation", 2023 Ninth International Conference on Biosignals, Images and Instrumentation (ICBSII 23) held on 16th and 17th March conducted by Department of Biomedical Engineering at Sri Sivasubramaniya Nadar College of Engineering In association with Centre for Healthcare Technologies, Chennai.

21. R Chitra, "Solar Based Parking Cum Charging Station for Electric Vehicles" 2023 IEEE International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering Organized by the Department of Computer Science and Engineering, R.M.K. Engineering College, Chennai, India during 1st and 2nd November, 2023.

22. R Chitra, Vishwa M, Swetha A and Hariharan B (2023 December), " Enhancing Crop Health Monitoring & Disease Identification in Agriculture" IEEE technically sponsored first international conference on Intelligent Computing and Control for Engineering and Business Systems - ICCEBS'23 @ Sri Sairam Engineering College on 14th and 15th december 2023.

23. R Chitra, S N Supradha, T Durgashree and T Boomika (2023 December), "Automatic Flow Control Electrolyte Monitoring System" IEEE technically sponsored first international conference on Intelligent Computing and Control for Engineering and Business Systems - ICCEBS'23 @ Sri Sairam Engineering College on 14th and 15th december 2023.

24. Attended one day online conference - Turnip Innovation Festival 2024 in Intellectual Property and Startups on 20th Jan 2024 organized by Turnip Innovations Pvt. Ltd in association with Qualcomm.

25. Chitra, R., Savithri, C. N., Swetha, A., Vishwa, M., & Bhat, P. (2024, October). Connecting Care: An IoT-Based T-Health Monitoring System for Rural India. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS 2024)* @ Sri Sairam Engineering College on 8th and 9th October 2024.

26. Chitra, R., Supradha, S. N., Durgashree, T., & Boomika, T. (2024, October). Smart Light Illumination. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS 2024)* @ Sri Sairam Engineering College on 8th and 9th October 2024.

27. Chitra, R., Savithri, C. N., Vishwa, M., & Bhat, P. (2024, October). Enhancing Efficiency in EV Charging Networks Through Smart Technologies. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS2024)* @ Sri Sairam Engineering College on 8th and 9th October 2024.

28. Chitra, R., Udaya, M. R., & Raghul, D. (2024, October). Advancement in Optical Communication: Performance Comparision between Laser and LED Technologies. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS2024)* @ Sri Sairam Engineering College on 8th and 9th October 2024.

29. Hari haran B., Swetha, A., Chitra, R., & Vishwa, M. (2025, January). Advanced NDRE Techniques for Precision Crop Monitoring and Analysis. In *2025 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS*'25) @ MANIT Bhopal, India on 18th and 19th January 2025.

30. Chitra, R., Kanish, R. B., Varman, R., & Tharunkarthi, G. (2025, April). WasteWise: Smart Incentive-Based Waste Management System using YOLOv8. In *2025 International Conference on Computing and Communication Technologies (ICCCT)* (pp. 1-5). IEEE. @ Sri Sairam Engineering College on 16th and 17th April 2025.

31. Chitra, R., Harshni, A., Deepika, D., & Meena, S. (2025, April). Smart Point-of-Care Respiratory Disease Tracking System. In *2025 International Conference on Computing and Communication Technologies (ICCCT)* (pp. 1-4). IEEE.@ Sri Sairam Engineering College on 16th and 17th April 2025.

32. Chitra, R., Roshhan, R. S., & Rajprasath, S. (2025, April). RF Energy Harvesting for Low-Power Devices. In *2025 International Conference on Computing and Communication Technologies (ICCCT)* (pp. 1-5). IEEE.@ Sri Sairam Engineering College on 16th and 17th April 2025.

Patent Details:

1. A Power Generating Kite System - Production of Electricity from the Wind - 202041004990 Issued on Feb 14 2020

2. Horticbot - An Integrated Crop Health And Pest Management With Ndre Analysis - 202441083950 Published on 08/11/2024.
3. AQUAVISION 14.1-Underwater Pollution Detection And Reduction System - 202541046770 A Published on 13/06/2025.
4. Incentive Based Waste Management System - 202541096851 A Published On 07/11/2025.
5. Unmasking Silence:Advancing Dysfluent Speech Understanding With Next Generation Tools - 202541096455 A Published On 07/11/2025.
6. CRITIX - Bovinebuff Identifier: A Biometric Identification System For Cattle Using Deep Learning - 202541132822 A Published On 27/02/2026

Workshop/Short course Organized:

1. Organized a workshop "FPGA Based System Design" in the International Conference on Communication, Computing and Internet of Things, IC3IoT 2018 on 16th February at Sri Sairam Engineering College and delivered lecture titled "Introduction to VLSI DESIGN"

2. Organized a workshop on "Applications of Embedded systems, IoT & Robotics towards Industry 5.0" for first year to final year UG students, PG and Phd from ECE,EEE, E&I, ICE, CSE,IT, Mechanical and other relevant departments, Sri Sairam Engineering College along with IIIRPD - Institute for Industrial interdisciplinary Research and Product Development in association with Abdul Kalam Vision India movement and MSME conducted 2days (6th and 7th jan 2020) program.

3. Organized a webinar on "Digitalization and BlockChain in Energy sector" for 3rd year ECE students, Sri Sairam Engineering College on 15th June 2020 by Mr P Rupamathaavan, Energy Management, ESCP Business School, London, UK

4. Organized a webinar on "Trends in Automotives" for 3rd year ECE students, Sri Sairam Engineering College on 18th June 2020 by Ms Y Anantha Keerthana ,Senior Engineer, L&T Services Ltd.

5. Organized a webinar on "Progressive Web App Development (mobile app)" for 3rd year ECE students, Sri Sairam Engineering College on 22nd June2020 by Mr Arun Jose,Stigmata Techno Solutions LLP, Chennai.

6. Organized a workshop on "VLSI Layout Design Using Open Source EDA Tool - MICROWIND" for third year ECE students, Sri Sairam Engineering College on 19.05.2021 by Mr. K. Srinivasan, Assistant Professor, Dept. of ECE, Sri Sairam Engineering College, Chennai.

7. Organized a webinar on "Deploy AI Robots on Hardware" for 2nd year ECE students, Sri Sairam Engineering College on 17th June2021 by Mr Sushil Soni, LIVEWIRE, Selaiyur. Chennai.

8. Organized an invited talk on Design and Debug of Embedded Systems for 2nd year, 3rd year, final year of ECE, EIE, Mechanical, AIDS, CCE, IT and EEE Sri Sairam Engineering College and Sri Sairam Institute of Technology on 23rd October 2021 by Mr Hareesh JanakiRaman, MCU Application Engineer, Texas Instruments, Houston. USA.

9. Organized an Intellectual Property Clinic(IP Clinic) for interested staff and students, ECE, Sri Sairam Engineering College on 15th and 16th November 2021 by Dr G Puthilibai, Coordinator-IPR Cell.

10. Organized an programme on World Intellectual Property day Sponsored by AICTE-MoE's- Institution Innovation council for staff and students, Sri Sairam Engineering College on 26th April 2022 by Dr. S P Subramaniyan - Deputy Controller of Patents and Designs and Smt. Anjana Haridas - Examiner of Patents and Designs.

11. Organized an Intellectual Property Clinic(IP Clinic) for interested staff and students, ECE, Sri Sairam Engineering College on 27th April 2022 by Dr G Puthilibai, Coordinator-IPR Cell.

12. Organized a workshop on Intellectual Property Rights(IPRs) and IP Management for Start Up for second year ECE students, Sri Sairam Engineering College on 11th May 2022 by Dr. G Puthilibai, Professor & Captain - IPR Cell, Sri Sairam Engineering College, Chennai. MOE's IIC Innovation Ambassador.

13. Organized a seminar on Intellectual Property Rights and Process in India for second year ECE students, Sri Sairam Engineering College on 22nd November 2022 by Dr. Rijo Jackson Tom, Data Scientist, Augusta HiTech Soft Sol., Coimbatore.

14. Organized a 5 days value added programme on IoT and Embedded Systems for second year ECE students, Sri Sairam Engineering College from 12.12.2022 to 16.12.2022 by Mr. A Vignesh Kumaran, Firmware Developer, Pantec E Learning Pvt. Ltd. Chennai and Mr. C Mohan Shankar, Firmware Developer, Pantec E Learning Pvt. Ltd. Chennai.

15. Organized a talk on Awareness on Smart India Hackathon(SIH) for interested students of ECE, Sri Sairam Engineering College on 8/9/2023 (Friday) @ 6.30pm via Gmeet. The talk was given by Mr. K Varunapriyan, Robotics Process Automation developer, Vuram Technologies and Mr K L Nirmal Raja, Master of Science in Data Science, Michigan Technological University, Houghton, MI, USA.

16. Organized an event Data Science Conclave for Sairam institutions students as

well for the external participants on 10.02.2024(Saturday) @ Sairam Engineering College - SSR Hall. The talk was given by Mr Suresh Kumar Ramasamy, AI Engineering Associate Manager, Accenture and Mr Eneeyan Nanmaran, Senior Data Analyst, Freshworks, Corporate Trainer.

17. Organized an event Control Tutorials Using MATLAB and Simulink for third year ECE students, Sri Sairam Engineering College on 15.09.2025 (Monday) by Dr R Arun, Assistant Professor-EEE, SSN College of Engineering, Chennai.

18. Organized an event Practical Sessions through a Hands on Session Smart Systems Conclave for third year ECE students, Sri Sairam Engineering College on 23.10.2025 and 24.10.2025 (Thursday & Friday) by Mr. T A Bharat waj, Senior Tech Lead- Physical Design, Elnfochips(An Arrow Company) and S Hema priya, Project Scientist, SETS, Chennai

Guest Lecture:

1. Delivered lecture titled "Introduction to VLSI DESIGN" for a workshop "FPGA Based System Design" in the International Conference on Communication, Computing and Internet of Things, IC3IoT 2018 on 16th February at Sri Sairam Engineering College

2. Delivered a talk titled "Insights about IPR" through online(ZOOM) on 16th September 2023. The event was organized by Computer Science & Engineering (Artificial Intelligence & Machine Learning) in association with IEEE Engineering in Medicine & Biology society for 2nd year AIML and IOT students.

Industrial Visit:

1. Visited Rajiv Gandhi Memorial Telecom Training center for Industrial visit Programme in training institute on 7th march 2017.

Additional Details:
Incharges

1. Students Admission file
2. Students Detail file
3. Students Club Detail file
4. Test and Retest file
5. Criteria 8- NBA
6. Class Co-ordinator (2015-2019)(2018-2022)(2021-2025)
7. Lab incharge- VLSI Lab
8. Mentor-(2016-2020)(2019-2023)(2022-2026)
9. Course Moderator-Control System Engineering(2020-2021_ODD).

10. Course Moderator- Digital Signal Processing Lab (2021-2022_ODD).
11. Internship-IV year Coordinator
12. Course Moderator- Engineering Practices Lab- Electronics (2021-2022_EVEN).
13. Patent Department Co-ordinator
14. Event Judge in AD-MAD (M-APPS clubs in association with Skill development club AICTE - SPICES sponsored activities Skills 'N' Thrills).
15. Course Coordinator - Microcontrollers & Embedded Systems - (2022-2023_EVEN)(2023-2024_EVEN).
16. Course Moderator- Control System Engineering_ 20ECEL508(2023-2024_ODD)(2024-2025_ODD)(2025-2026_ODD)(2025-2026_EVEN).
17. Department SIH - 2023 Coordinator in Saihackfest - 2023 held on 20.09.2023 and 21.09.2023.
18. SIH 2024(SCOPE - EXECUTOR)-Treasurer
19. SIH 2025(SCOPE - EXECUTOR)-Treasurer

Activity

1. Attended "National Instruments Technical Symposium 2016" on 8th november 2016 at Radisson Blu.
2. MSME proposal submitted-Shortlisted in College level.-2019
3. Guided students participated in Buoyanci innovation challenge 2019.
4. Applied for Young Achiever Award - 2021(Nominated for the Award).
5. Guided students for a project, Design of Smart Air Purifier Facial Mask.The project got selected for Regional Convention of Chhatra Vishwakarma Awards - 2021.
6. Proposal submitted to TNSCST for conducting workshop.
7. Guided students for a project,Automatic plant watering system using Arduino and Moisture Sensor for being presented in the "5th National Level IEEE Project Competition-2021" Organized by IEEE Student Branch (STB17861), GSSSIETW in association with IEEE Bangalore Section and IEEE Mysore Subsection on 26th June 2021.
8. Project submitted to TNSCST for funding(2021-2022).
9. Attended keynote session on 10.03.2022, AI and IoT New Revolution by Prof. Eros G Pasero in the 2022 International Conference on Communication Computing and Internet of Things(IC3IOT-2022) held on 10th &11th March 2022.
10. Attended keynote session on 10.03.2022, Integrating BlockChain in IoT - Concepts and Examples by Dr Fakhrul Hazman in the 2022 International Conference on Communication Computing and Internet of Things(IC3IOT-2022) held on 10th &11th March 2022.
11. Attended keynote session on 10.03.2022, SWIPT - Simultaneous Wireless Information and Power Transmission for Space Exploration by Prof. Dr Nuno Borges in the 2022 International Conference on Communication Computing and Internet of Things(IC3IOT-2022) held on 10th &11th March 2022.

12. Session Chair in IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai. 8th and 9th December 2022.
13. Zenista - Coordinator - 16.03.23
14. Reviewer in Cybernetics and Systems Journal.
15. Reviewer in 2nd International Conference on RECENT ADVANCES IN ELECTRICAL, ELECTRONICS, UBIQUITOUS COMMUNICATION AND COMPUTATIONAL INTELLIGENCE (RAEEUCCI - 2023), TECHNICALLY CO-SPONSORED BY THE IEEE, held from 19 - 21 April 2023, organized by the Department of Electronics and Communication Engineering, SRMIST, Kattankulathur, Tamil Nadu, India.
16. Reviewer for International Conference on International Conference on Electrical, Computer and Energy Technologies (ICERET - 2023), 16 & 17 November 2023, Cape Town South Africa.
17. Faculty mentor for the Team Electro participating in Smart India Hackathon 2023 - 19.12.2023 and 20.12.2023 - Anand Institute of Higher Technology _ Winner 1 lakh rupees.
18. Volunteered as proctor to guide and oversee competing teams for the IEEEXtreme 17.0 programming competition that hosted +17,000 participants 29th October 2023.
19. Participated in the "Faculty Sensitization Program on Sponsored R & D Projects" organized by Bureau of Indian Standards held on 09.01.2024.
20. Won Best paper award for the paper " Enhancing Crop Health Monitoring & Disease Identification in Agriculture" in IEEE technically sponsored first international conference on Intelligent Computing and Control for Engineering and Business Systems - ICCEBS'23 @ Sri Sairam Engineering College on 14th and 15th december 2023.
21. Received Young Researcher Award.
22. Received a fund of rupees five lakhs from yukti innovation challenge 2023
23. Received NPTEL Believer JAN- APRIL 2024
24. Received NPTELMotivated Learner JAN- APRIL 2024
25. Received NPTEL Discipline Star JAN- APRIL 2024
26. Received NPTELMentor Award JAN- APRIL 2024
27. Judge for the event "Fusion of Tech and Tales" held on 29.02.24 - NDLI Club.
28. Reviewer in 2024 International Conference on Communication, Computing & Internet of Things (IC3IoT - 2024), held on 17 - 18 April 2024, organized by the Department of Electronics and Communication Engineering, Sri Sairam Engineering College.
29. Technical Advisor for the event "Infoculture Fiesta" held on 8.04.24 - NDLI Club.
30. Evaluator for the event "Infoculture Fiesta" held on 8.04.24 - NDLI Club.
31. Received NPTEL Believer Jul-Dec 2024
32. Ieee Industrial Electronics Society Student Branch Chapter Inauguration Of first Edition of EvoEdge 2024 - Judge for Poster Presentation.

33. Final year (2024-2025)_ Supervisor_Sairam SDG Inspirathon 2.0_Feb 19th to Feb 21st_Goal Number 2_Second Prize.
34. Mentored the project titled Smart point of Respiratory Disease Tracking System-ELITECOM 2025 Project Expo_Fourth National level Symposium on Recent Trends in Electrical, Information & Technology, Electronics & Communication and Computers organized by IETE Chennai Centre_20 Feb 2025.
35. Mentored the project titled LaserComm: Advancing High - Speed Laser Communication for Autonomous Systems_ Presented at GMRT Virtual Science Day Exhibition 2025. GMRT Observatory is functioning under NCRA-TIFR of DAE, Govt. of India.
36. Reviewer in 2025 - 5th International Conference on Computing and Communication Technology (ICCCT - 2025), held on 16 - 17 April 2025, organized by the Department of Information Technology, Sri Sairam Engineering College.
37. Received NPTEL Believer JAN- APRIL 2025
38. Received NPTEL Discipline Star JAN- APRIL 2025
39. Completed NPTEL domain in VLSI Design and Data Science April 2025.
40. Participated in Technical workshop for NPTEL Stars held on 6th July 2025 at SAC Auditorium, IIT Madras.
41. Received NPTEL Believer JUL- DEC 2025
42. Reviewer in 2025 - 10th IEEE International Conference on Smart Structures and Systems (ICSSS - 2026), held on 12 - 13 December 2025, organized by the Department of Electronics and Communication Engineering & Centre for Micro Nano Design & Fabrication, Saveetha Engineering College.