



Sri SAI RAM ENGINEERING COLLEGE

An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi
 Accredited by NBA and NAAC "A+" | An ISO 9001:2015 Certified and MHRD NIRF ranked institution
 Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in



Founder Chairman : MJF. Ln. Leo Muthu

Name: CHITHRAKKANNAN R		
Designation	Associate Professor	
	UG	B. E (Instrumentation & Control) (2000)
	PG	M.Tech., (Control Systems & Instrumentation) 2004
	Ph.D.	Pursuing (Identification and Classification of Rice Plant Disease using Deep learning)
Area of Specialization	Machine Learning, Deep Learning, Advanced Control System, Process control, Power Plant Instrumentation, Digital Signal Processing, IOT, and Image Processing.	
Experience	Teaching- 24 Years	
Number of Workshops/ Conferences/ FDP Attended	FDP	19
	Workshops	21
	Conferences	09
Publication	International Journal	12
	National Journal	02
	Internl. Conference	04
	National Conference:	02
Membership	LM ISTE, IEEE	
Research Guidance:	UG Projects – 52	
Patent Published	14	
Staff Achievement	Received Best Teacher Award from Lions club, Chennai.	

Experience:

Teaching Experience: (24 years)

S. No	Name of the Institution	Designation	Department	Period of Experience
1.	Sri Sairam Engineering College, Chennai	Associate Professor	Instrumentation and Control Engineering	22 years 1 months (Till date)
2.	Bharath Nikethan Engineering College	Lecturer	Electronics and Instrumentation	2 year 3 months

ONLINE CERTIFICATION

- 1. Artificial Intelligence and Deep Learning Techniques, Dept. of IT, BSAR Crescent Institute of science & Technology.**
- 2. Introduction to AI from simple learn**
3. AI for Everyone: Master the Basics, from IBM
4. Beyond the Sustainable Development Goals (SDGs): Addressing Sustainability and Development
From University of MICHIGAN (COURSERA)
- 5. Machine Learning A-Z, Hands on Python & R In Data Science from udemy**
- 6. Introduction to IOT and Embedded Systems, University of California, Irvine.**
- 7. Introduction to Programming with MATLAB, University of Vanderbilt.**
- 8. The Arduino platform and C Programming, University of California, Irvine.**

JOURNALS PUBLISHED

- [1] R. Chithrakkannan, P. Kavitha, T. Mangayarkarasi, and R. Karthikeyan, "Breast cancer detection using machine learning," *International Journal of Innovative Technology and Exploring Engineering*, vol. 8, no. 5, pp. 50–55, 2019.
- [2] K. Mohanraj, S. Vijayalakshmi, N. Balaji, R. Chithrakkannan, and R. Karthikeyan, "Smart warehouse monitoring using IoT," *International Journal of Engineering and Advanced Technology*, vol. 8, no. 6, pp. 3597–3600, 2019.
- [3] R. Chithrakkannan, "IoT-based patient monitoring system using Raspberry Pi 3 and LabVIEW," *Pakistan Journal of Biotechnology*, vol. 14, no. 3, pp. 337–341, 2017.
- [4] R. Chithrakkannan, "Intelligent agricultural drones utilizing nano-fertilizer dispensation for precision farming," 2024.
- [5] R. Karthikeyan, G. Nalinashini, R. Chithrakkannan, and K. Mohanraj, "Implementation of GUI for class attendance using face detection and recognition system," *International Journal of Innovative Technology and Exploring Engineering*, vol. 9, no. 2, 2019.
- [6] C. R. Karthikeyan, R. Chithrakkannan, H. Illango, P. Rajkumar, and S. Sokkanarayanan, "Improving medical imaging diagnostics by utilizing compression techniques and implementing FPGA acceleration with Vivado HLS," *International Journal of Intelligent Systems and Applications in Engineering*, 2023.

- [7] R. Chithrakkannan and N. R. Krishnamoorthy, “Refinement network with region attention mechanism-based segmentation model,” *International Journal of Image and Graphics*, Art. no. 2750052, 2024.
- [8] R. Chithrakkannan and N. R. Krishnamoorthy, “Comparative analysis of rice plant nutrient deficiency prediction using CNN and optimization through invasive weed optimization (IWO),” in *Proc. International Conference on Power, Energy, Control and Transmission*, 2024.
- [9] R. Chithrakkannan, B. R. Fadheela, A. J. Sarojini, and E. N. Malini, “Beyond weather and terrain: A biodegradable drone system for resilient epidemic-aware deliveries,” in *Proc. International Conference on Power, Energy, Control and Transmission*, 2024.
- [10] R. Chithrakkannan and J. Jerlin, “IoT-based smart lighting and room automation,” in *Proc. International Conference on Power, Energy, Control and Transmission*, 2024.
- [11] T. Mangayarkarasi and R. Chithrakkannan, “Pattern knowledge discovery based lung cancer classification system,” *Cardiometry*, pp. 623–628, 2023.
- [12] T. Mangayarkarasi and R. Chithrakkannan, “Pattern knowledge discovery based lung cancer classification system,” *International Journal of Cardiometry*, pp. 623–628, 2024.
- [13] R. Chithrakkannan, “Technology enhanced mobility orthosis for elderly people,” *Journal of the Gujarat Research Society*, vol. 21, no. 17, pp. 2106–2115, 2019.
- [14] R. Chithrakkannan, “Health monitoring of air compressor using IoT,” in *Proc. 6th International Conference on Chip, Circuitry, Current, Coding, and Communication*, 2018.
- [15] N. B. R. Chithrakkannan and K. Mohanraj, “Aircraft tracking using automatic dependent surveillance–broadcast,” *International Journal for Research in Applied Science and Engineering Technology*, 2017.
- [16] C. R., A. Narayanan, and J. Jerlin, “IoT-based smart lighting and room automation,” in *Proc. International Conference on Power, Energy, Control and Transmission*, 2024.

INTERNATIONAL CONFERENCES PRESENTED

1. HEALTH MONITORING OF AIR COMPRESSOR USING IOT, IC7-2018, Sri sairam college of engineering, Bangalore.
2. PULMONARY FISSURE DETECTION AND CLASSIFICATION OF LUNG CT IMAGES USING SVM CLASSIFIER”, International conference on ICC- Sri Sairam Engineering College, Chennai.
3. “ DC motor control using Neurofuzzy, “international conference on computing, control 2012 At 2012, Dr.M.G.R engineering college, Chennai.

SPECIAL LECTURES DELIVERED

1. Resource person for AICTE sponsored Two weeks FDP on “Machine learning techniques for imaging and health care with python” on 28.03.2021 at Sri Sairam Engineering College, Chennai, titled “Breast Cancer Detection using Machine Learning”.
2. DST sponsored Seminar on Control Strategy Prediction between Conventional & Intelligent Controllers, Neuro Fuzzy Control on 20.04.2018
3. Resource person for Valliammai Engineering College, FDP on Process control on 28.11.2018.
4. Resource person for ATAL mentor Change for Omega International School, Pallavaram.
5. DST SERB SPONSORED National Seminar on Control Strategy Prediction between Conventional and Intelligent Controller at Saveetha Engineering College

Patent Published :

1. NON INVASIVE THERMAL IMAGE ANALYSIS OF PETROL FOR ADULTERATION DETECTION
2. METHOD FOR PREPARING ALOE FEROX BANANA FIBER COMPOSITE
3. HYBRID TRICYCLE WITH TO AND FRO ACTION OF STEERING MECHANISM
4. AN INTELLIGENT SMART STREET LIGHT SYSTEM WITH SAFETY TECHNOLOGY AND ENVIRONMENT MONITORING.
5. WIND TURBINE DESIGN PATENT.
6. THE EFFICACY OF ARTIFICIAL INTELLIGENCE AND INTERNET OF THINGS MODELS FOR SOIL MONITORING AND CROP MANAGEMENT
7. SYSTEM AND METHOD FOR DECOMPOSING ORGANIC AND FOOD WASTE
8. THE EFFICACY OF ARTIFICIAL INTELLIGENCE AND INTERNET OF THINGS MODELS FOR SOIL MONITORING AND CROP MANAGEMENT
9. ENHANCING AGRICULTURAL PRODUCTIVITY WITH IOT, AI, AND ML A SMART APPROACH TO CROP MONITORING
10. MACHINE LEARNING AND IOT FOR PREDICTING ELECTRIC POWER AND OPTIMISING FEATURES BASED ON SOIL MOISTURE IN AGRICULTURE

11. THE EFFICACY OF ARTIFICIAL INTELLIGENCE AND INTERNET OF THINGS MODELS FOR SOIL MONITORING AND CROP MANAGEMENT.
12. MACHINE LEARNING–DRIVEN ADAPTIVE INTRUSION DETECTION SYSTEM FOR HETEROGENEOUS IOT NETWORKS
13. THREE-LEVEL NEUTRAL-POINT CLAMPED (NPC) INVERTER WITH MULTI-MODE SYNCHRONIZED PULSE WIDTH MODULATION (PWM) SCHEMES
14. ARTIFICIAL INTELLIGENCE–OPTIMIZED HARDWARE ACCELERATOR SYSTEM FOR EDGE COMPUTING

UBA Funding:

"Future-Ready Mechanics: E-Bike Servicing Training for Rural Workshops" with the sanction of Rs 50,000 as Under the category of Capacity Building, Strategy for Convergence and Implementation of Various Govt. Schemes

IEEE Funding :

IEEE Tech for Good Project titled "Bridging the Digital Divide – Road to Digital Connectivity (25-T4G-136) US \$ 8,908 (Rs of 7,64,752) in somanglam village.