

Patent Published	12
Staff Achievement	Won best teacher award – For Excellence in Teaching Service from LIONS Club OF MMS in the year 2006
	Women’s Educational Achievers Award-2015- for service in Teaching Field- awarded by KALVI CHUTAR
	Won KALVI SEMMAL AWARD-2017 from KAVIYARASAR KALAI TAMIL SANGAM
	Excellence for Women in R&D-Awarded by International Journal of MC Square Scientific research Jan 2021
	Won BEST TEACHER AWARD for Excellence in Teaching, Research,CSR activities-Awarded by LIONS CLUB INTERNATIONAL-GOLDEN HANDS- Sep 2025
	MENTOR- UTP-VRAP -2022(Student Internship Program
	Mentor-IEEE EMBS STUDENT MENTORING PROGRAM (SMP) held from August 24 to February 25 by the IEEE Engineering- Guided 1 Project-International Level
	IEEE Mentor- Internship Program June 2025-July 2025-National Level- Guided 5 Projects and Successfully
Resource Person	Delivered a Guest Lecture on Artificial Intelligence for Future to students of Sri Kumararani Meena Muthiah College of Arts and Science College
	Handled a session for AICTE sponsored STTP on Sensor Interfacing and Controller Implementation in Engineering Systems- Saveetha Engineering College, Chennai

	<p>Handled a session for AICTE Sponsored Two Weeks FDP on Machine Learning Techniques for Imaging and Health care with Python- Title Ultrasound Diagnostic Methods, Imaging and Research Prospective at Sairam ICE</p>
	<p>Delivered a Guest Lecture -Recent trends and Applications- Sensor Interfacing in LabView Environment to ICE Students</p>

<p>On-line certification courses</p>	<p>Post Graduate Program In MACHINE LEARNING- from Great Lakes Execute LEarning Program</p>
	<p>Completed Panchayat Administration and Rural Development Schemes Training at SIRD</p>
	<p>Completed Certification Course on SocialEmotional Educational Education: Knowledge to Practice(SEEK)</p>
	<p>NITTTR - ALL 8 Modules</p>
	<p>NPTEL- over 25 Courses</p>
	<p>Coursera- UCI- Introduction to Internet of Things and Embedded Systems</p>
	<p>Coursera- Deep Learning.Ai- AI for Everyone</p>
	<p>Coursera- University of Michigan-Programming for Everybody (Getting Started with Python)</p>
	<p>Future Skills-Simplilearn- Introduction to RPA</p>
	<p>Future Skills-Simplilearn- Introduction to IoT</p>

	Future Skills-Simplilearn- Introduction to Project Management
	Tata Steel- E-learning Program on PLC'S
	Udemy- Learn Image Processing and GUI's using MATLAB
	Udemy- Hand's On Python and R in Data Science
Award Winning Projects	INNOVATHON 2.0 -SAIRAM INNOVATION ECOSYSTEM- Overall Best Project-2023
	ISTE best Project Award- 2004
	Kerala Govt.Best Project award-2005
	"Design of MEMS Based Self-Powered Piezo Resistive Tyre Pressure Sensor & MATLAB Based Simulation of Tyre Pressure Monitoring System"- Project –first Prize- Project exhibition 2014

	"Maternal Svaasthya care"-Project Won -2 nd Prize in ISTE Model Presentation-2018
	" Brain Pressure Analysis"- Project-First Prize in Project Exhibition 2018
	"Design of Fuzzy Controlled Industrial Wax Moulding Unit using LABVIEW"- Project-second Prize in Project Exhibition 2020
General	ATAL MENTOR of Change by Atal Innovation Mission-Govt.of India
	Steering Committee member for International and National Conferences

	Co-Ordinator for establishment of Advanced Virtual Instrumentation Lab – 15 Lakhs fund from AICTE Modrob Scheme.
	Co-Ordinator for Anna University sponsored FDP Biomedical Instrumentation- Fund from Anna University Rs.32,000/-
	R&D initiative with CSIR, IGCAR Kalpakkam,
	EC member for ISA- South India Section till 2012
	Coordinator for the S2T-Schols towards Technology Programme-an initiative with the funding of TNSCST-Govt.of TamiNadu for the year 2018,2019
	Team Lead for SAIMUTHAMIZH MADRAM-Tamil Literary club of Sairam Institutions
	Instrumental in establishing Industry – Institute Partnership for ICE department through various Industry linked Programmes like Guest Lecture, Seminars, Industry based consultancy, Projects, Industrial visits and MoU’

Experience:

S. No	Name of the Institution	Designation	Department	Period of Experience
1.	Sri Sairam Engineering College, West Tambaram, Chennai	Lecturer	Instrumentation and Control Engg	5 yrs 8 months (Nov2000-July 2006)
2.	Sri Sairam Engineering College, West Tambaram, Chennai	Senior Lecturer	Instrumentation and Control Engg	3 yrs (Aug2006-July 2009)
3.	Sri Sairam Engineering College, West Tambaram, Chennai	Associate Professor	Instrumentation and Control Engg	15 yrs (Aug2009-till date)

4.	Thangavelu Engineering College, Chennai	Lecturer	Electronic and Instrumentation Engg	1 yr (Dec 1999-oct 2000)
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Workshop/Conferences/FDP:

Attended:

- IEEE FDP- Summer School on Medical Imaging 2025- IITDM Kancheepuram June 2025
- Curriculum Audit Training- In Three Phases by NITTTR , Chennai- 2023-2024
- ATAL Online FDP on “Control Systems and Sensors Technology” Manipal Inst.of Technology Jan 2021
- ISA webinar- “IoT and Cloud Technologies Revolutionizing Healthcare”-Jan 2021
- ATAL Online FDP on “Wearable Devices” Kongu Engineering College- Sep 2020 ● ISA webinar-“ Functional safety in Chemical Process Industries”- April 2020 ● Three Days Workshop on “MATLAB based System Design” –Sep 2019
- Five Days FDP on “Artificial Intelligence”- Sri Sairam Engineering College-Dec 2019
- Faculty Training Programme on “NANO Instrumentation Systems and Biomedical Nanotechnology” B.S.Abdur Rahman Crescent University- Nov 2017
- IEEE-Workshop on “Emerging Trends and Future Perspective in Image Processing and Computer Vision” Jan 2017
- KCT- Industry- Academia- INSTRUMENTATION MEET 2016- March 2016 ● Attended 3rd WOSA- outcome based Accreditation – March 2016 ● FDP- “Innovations in Research and Projects”- TCS Hyderabad- June 2016 ● Technical talk on “Advanced Process Control for Process Industries”-Sep 2016 ● IEEE-Workshop on “Emerging Trends and Future Perspective in Image Processing and Computer Vision” Jan 2015
- Workshop on “Recent Developments in Medical Image Processing “SSN Engineering College 2014
- Workshop on “MEMS and NEMS- Fundamentals,Design and Application”Dec 2013- IIT Hyderabad
- FDP- Emotional Intelligence –CTS,Chennai- April 2013

- Workshop on “ART OF JOURNAL AND THESIS WRITING” – JAN 2012
- Workshop on MEMS software- August 2011
- Workshop on “Introduction to Comsol Multiphysics Version 4.2” August 2011 • CSIR Sponsored Workshop on “SMART MEMS AND SENSOR SYSTEMS Dec 2010
- Seminar on “Safety Integrity a life cycle Approach”- IIT MSDRAS- Nov 2010 • Workshop on “Biomedical Signal and Image Processing” Sep 2010 • Workshop on “ Micro Electro mechanical system “ SRM university ,Aug 2009 • Workshop on “ Virtual instrumentation – LABVIEW based machine vision and embedded applications” ,Easwari Engineering College, Feb 2008
- Workshop on “Relevance of Instrumentation and Automation in today’s world” organized by ISA south India section during JAN 2008
- STTP in “Recent trends in Bio-medical Instrumentation “, SRM University , 2005 • Workshop on “Recent trends in Process Automation”, St.Joseph College of Engineering , 2004
- Workshop on “Advances in Process control and Instrumentation”, Easwari Engg. College,2004
- Workshop on “ DSP and Embedded Systems”- Feb 2004
- Workshop on “ Virtual Instrumentation ,Lab View and Embedded system- July 2003
- Workshop on “Effective Teaching” August 2002
- Seminar on “IT in IT” – July 2002
- Workshop on “Teaching Technology and Counseling Skill” Feb 2001

Organised:

- Department National Conferences- 2013 and 2014
- ISA Students MEET and Leadership meet- 2010 and 2011
- Workshop on “PLC based Industrial Automation”, July 2009
- Seminar on “Role of Instrumentation in Automation industries” , July 2009 • Seminar on “Detailed Engineering in Instrumentation and Control”, Sep 2009 • Workshop on “Electronics Design and Automation “ , Aug. 2009
- Faculty development program on “Biomedical Instrumentation “Sponsored by Centre for Faculty Development, Anna University, Chennai during winter 2007.

Publications:- Total 40 Journal Publications (Including 24- SCOPUS, 1-WoS)

Books-3, Book Chapters-2

LIST OF JOURNALS-in the order of number of citations (International, National journals and International Conferences)

Citations-119:h-index-6;i10 -index-3

- **Breast cancer detection using machine learning**

R Chtihakkannan, P Kavitha, T Mangayarkarasi, R Karthikeyan

International Journal of Innovative Technology and Exploring Engineering -2019 Volume-8, Issue 11,Pages-3123-3126

- **PNN-based analysis system to classify renal pathologies in kidney ultrasound images**

T Mangayarkarasi, DN Jamal - 2017 2nd International Conference on Computing and Communication Technologies (ICCCT'17)

- **An IoT based safe assembly point alert system**

T Mangayarkarasi, K Umamathy, A Sivagami, D Subitha-Journal of Physics: Conference Series, Volume 196, Issue-7, Pages 072013, Publisher-IOP Publishing

- **FPGA implementation of smart water quality monitoring system**

N Balaji, S Vijayalakshmi, K Durgadevi, K Mohanraj, T Mangayarkarasi

Publication date -2019-International journal of innovative technology and exploring Engineering, Volume-8, Issue-11, Pages -3136-3139

- **Kidney abnormalities prediction in ultrasound images using transfer learning approach**

T Mangayarkarasi, D Najumnissa Jamal,2023, Conference 2023 IEEE Second International Conference on Advances in Computational Intelligence and Communication (ICACIC), Pages-1-6

- **Android application and SMS alert-based garbage monitoring and navigation system**

K Umamathy, T Mangayarkarasi, D Subitha, A Sivagami-2021; Journal of Physics: Conference Series, Volume 1964, Issue 6, Pages -062064- Publisher-IOP Publishing

- **Harnessing IOT For Automated Sorting System**

T Mangayarkarasi, C Sathyaraj, GV Pradyumna, ZA Mohamed Kaifullah-2024

Conference -2024 IEEE International Conference on Communication, Computing and Internet of Things (IC3IoT)-Pages 1-7

- **A novel method of vibration measurement using MEMS accelerometer**

M Divya, S Ramgowri, T Mangayarkarasi, AV Juliet-2012

International Conference on Computing and Control Engineering (ICCCE 2012), Volume 12

- **Neural Network Approaches to Predicting Vector-Borne Disease Spread with IoT Environmental Sensors**

T Mangayarkarasi, R Krishnaswamy, B Bharathi, M Muthulekshmi, R Vinodha-2025

Conference-2025 3rd International Conference on Sustainable Computing and Data Communication Systems (ICSCDS)-Pages 279-284

- **Covid-19 Mask detection Using Matlab based Image Processing-2021**

R.Paranavikha T.Mangayarkarasi,S,Sai Anusha-Journal-Illkogretim Online-Elementary Education Online-Volume 20 ,Issue 1,Pages 5016-5023

- **Renal Anomalies through Ultrasound Imaging and Segmentation Techniques**

T Mangayarkarasi, D Najumnissa Jamal, S Kaja Mohideen-2024

Conference-2024 Tenth International Conference on Bio Signals, Images, and Instrumentation (ICBSII), Pages 1-6

- **Machine Learning Based System for Nephrologist to Classify Diabetic Kidney Disease**

T Mangayarkarasi, V Kalyani,2023-IEEE-Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Pages 1-7

- **Analysis and classification of kidney ultrasound images using SIFT features with neural network classifier**

T Mangayarkarasi, D Najumnissa Jamal-2021

International Journal of Biomedical Engineering and Technology, Volume-35,Issue-4,Pages 340-361, Publisher-Inder science Publishers (IEL)

- **Development of patient assistive Tool for detection of Abnormalities in kidney**

T Mangayarkarasi, D Najumnissa Jamal-2015,Journal-Indian Journal of Science and Technology, Volume -8, Issue-24,Publisher -Indian Society for Education and Environment

- **Machine Learning Based Jaundice Detection for Neonates**

T Mangayarkarasi, VS Abitha, R Jayasree, V Kalyani, S Vijaya Varshini-2025 IEEE International on Computing and Communication Technologies (ICCCT),Pages 1-7

- **Comprehensive Evaluation of Machine Learning Models for Epileptic Seizure Detection**

Punam Raskar T. Mangayarkarasi, Pranit Gore, Aditya Mane,2025,8th IEEE Pune Section International Conference

- **Hybrid Machine Learning Classifier Models for Kidney Disease Detection**

T Mangayarkarasi, D Najumnissa Jamal, 2025 Journal Informatica, Volume -49 ,Issue 7

Pages 145-156, Publisher -Slovenian Society Informatika/ Slovensko drustvo Informatika

- **Smart Jacket: Integrated Sensor System for Real-Time COPD and Sleep Apnea Monitoring**

T. Mangayarkarasi, S Parnika, S Abirami, K Jayashree, C Nalini-2024

Conference -2024 IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS),Pages -1-6

- **Arduino Based Smart Metering System with Smart 2560**

T Mangayarkarasi-2024; Conference IEEE 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Pages-1-4

- **EXPLORING MACHINE LEARNING TECHNIQUES IN LUNG CANCER DETECTION VIA ABSOLUTE INTEGRAL-BASED ANALYSIS**

S Sumathi Dr K Sumathi, T Mangayarkarasi, B Panjavarnam, R Tamezheneal, AE Prabhu

2024-Journal-International Development Planning Review; Volume-23, Issue 1, Pages 222-234

ALL THE REMAINING JOURNALS- CONFERENCE PAPERS can be accessed using

Google Scholar id-<https://scholar.google.com/citations?user=14gMnoQAAAAJ&hl=en>

Scopus Id-<https://www.scopus.com/authid/detail.uri?authorId=56907019500>

Web of Science -<https://www.webofscience.com/wos/author/record/2377911>

<https://vidwan.inflibnet.ac.in/profile/182280#>

other_information_panel <https://sairam.irins.org/profile/182280>