

PERSONAL DETAILS AND AFFILIATION		
Name of the Faculty Member	MANJULA DEVI. R	
Designation	ASSISTANT PROFESSOR (SG)	
Department	ELECTRONICS AND COMMUNICATION ENGINEERING	
Date of joining the institution	02.06.2010	
Address for Communication	5/85 –K1, Manju Nagar, Thoonukal Vilakku, Alampatti road, Kovilpatti -628503.	
Email ID	manju.rengasamy@gmail.com , rmdece@nec.edu.in	

EDUCATIONAL QUALIFICATION					
S.NO.	QUALIFICATION	INSTITUTION STUDIED	UNIVERSITY / BOARD	Class	YEAR OF PASSING
1	B.E. (ECE)	P.S.R. Engineering College, Sevalpatti	ANNA UNIVERSITY, CHENNAI	82.4% First Class with Distinction	2008
2	M.E./M.Tech.	Mepco Schlenk Engineering College, Kovilpatti	ANNA UNIVERSITY, CHENNAI	87% First Class with Distinction University First rank	2010
3	Ph.D.	Anna University, Chennai	ANNA UNIVERSITY, CHENNAI	-	2022

EXPERIENCE						
S.NO.	NAME OF THE INSTITUTION / ORGANIZATION	POSITION HELD	FROM	TO	EXPERIENCE	
					Y	M
1.	NATIONAL ENGINEERING COLLEGE, KOVILPATTI	Lecturer	02.06.2010	31.10.2011	1	4
2.	NATIONAL ENGINEERING COLLEGE, KOVILPATTI	Assistant Professor	01.11.2011	30.07.2016	4	8
3.	NATIONAL ENGINEERING COLLEGE, KOVILPATTI	Assistant Professor (Senior Grade)	01.08.2016	Till date		

LIST OF INTERNATIONAL CONFERENCE PUBLICATIONS

1	Ms.R.Manjula Devi , presented a paper on “An FPGA based Architecture for Textural Features Characterization of MR Images” in the international conference Intelligent Information System and Management(IISM’10), in RVS College of Engineering and Technology, during 7 th and 8 th June, 2010.
2	Ms.M.A.Ruhaya Rameez Fathima, Mrs.R.Manjula Devi , presented a paper on “Improved Method of Detecting Face Using Multi-Image Saliency” in the international conference Hi- Tech Trends in Emerging Computational Technologies, in Sethu Institute of Technology, Madurai during 8 th and 9 th April, 2015.
3.	Ms.M.A.Ruhaya Rameez Fathima, Mrs.R.Manjula Devi presented a paper on “Improved Method of Tumor Segmentation Using Saliency” in IEEE Sponsored 2nd International Conference on Innovations in Information Embedded and Communication Systems ICIIECS’15, in karpagam college of Engineering, Coimbatore.
4.	Ms.M.Priyanka, Mrs.R.Manjula Devi , presented a paper on “A Novel method of car authentication and accident alert system using ARM” in the international conference on ICEECE’15, organized by Vivekanda College of Engineering for women, Trichengode during 11 th and 12 th March, 2015.
5.	Ms.G.Padmavathi, Mrs.R.Manjula Devi , presented a paper on “Segmentation and classification of tumor” in the international conference on ICEEICA-16, held at Selvam college of Technology, Namakal during 2 nd and 3 rd June, 2016
6.	Ms.G.Padmavathi, Mrs.R.Manjula Devi , presented a paper on “ Detecting Liver cancer from CT scan images” in IEEE sponsored 3 rd international conference on ICIIE’16 held at Karpagam College of Engineering, Coimbatore during 17 th and 18 th March, 2016.
7.	Mrs.R.Manjula Devi , Dr.V.Seenivasagam presented a paper on“Segmentation and Detection of Tumor from Liver CT images using Enhanced K-means Algorithm” in 4 th international conference on Advanced Computing and Communication Systems(ICACCS 2017) held at Sri Eshwar College of Engineering during 6 th and 7 th January, 2017 (Received Best Paper Award)
8.	Mrs.R.Manjula Devi , Dr.V.Seenivasagam presented a paper on “A Survey on various image processing techniques for detection of Tumor from Liver CT images” in the Third international conference on Computational Intelligence” organized by Sethu Institute of Technology, during 5 th and 6 th April, 2018.

9.	P.Gokila, R.Raja Meena, K.Priyadarshini, Mr.I.Vivek Anand, R.Manjula Devi Presented a paper on “Low power implementation of Daubechies and wavelet filter for the diagnosis of ventricular Fibrillation using Reconfigurable multiplier blocks” in the National Conference on Communication, Computing and System Design on March 19, 2019
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LIST OF INTERNATIONAL JOURNAL PUBLICATIONS

1.	Ms.M.A.Ruhaya Rameez Fathima, Mrs.R.Manjula Devi , (2015). Improvised method of Tumor Segmentation using Saliency. International Journal of Applied Engineering Research Vol.10, No. 20
2.	Ms.G.Padmavathi , Mrs.R.Manjula Devi , (2016)Segmentation and Classification of Tumor from liver CT images. International journal of Innovative Research in Engineering Science and Technology,Vol. 4, Issue 02.
3.	Ms.S.Amutha, Mrs.R.Manjula Devi , (2016). Early Detection Malignant Melanoma using Random forest algorithm. International Journal for Trends in Engineering and Technology Vol.1, issue 1.
4.	Manjula Devi, R. , and Seenivasagam, V., 2020, ‘Automatic segmentation and classification of liver tumor from CT image using feature difference and SVM based classifier, Soft Computing , 24, pp.18591– 18598 (IF – 3.643)
5.	Manjula Devi R , & Shenbagavalli A, 2021, ‘An Automatic Detection of Liver Tumor from CT Abdominal Images - A Comparative Approach’, Journal of Medical Imaging and Health Informatics , vol.11, No 11, pp. 2845-2852. (IF – 0.89)
6.	Guru Prasad Murugan, Abiudh Durairaj R, Sharan Kishore R , Dr. Manjula Devi R , Dr. Jeyalakshmi Velusamy, Biomedical device powered by triboelectric nanogenerator, e-Prime - Advances in Electrical Engineering, Electronics and Energy, Volume 10,2024,
7.	Siva Rama Krishnan S; Siva Sankaran G; Samrith U; Abdul Samath A; R. Manjula Devi, Intelligent Traffic Signal Management System, international conference for Emerging Technologies for Intelligent Systems (ETIS) , 2025 (Scopus Indexed)
8.	R.Manjula Devi, Reformed histogram equalization with Tasmanian devil optimization and hybrid MDHNN-MLP for lung tumor detection, Evolving Systems 17, 21 (2026). https://doi.org/10.1007/s12530-025-09776-9
9	Manjula Devi R, Reinforcement learning-based closed-loop control system for adaptive process parameter optimisation, Nondestructive Testing and Evaluation , 1–19. https://doi.org/10.1080/10589759.2026.2626956
10	R. Mani Bharathi, S. Krishna Priya, P. J. Subha, R. Manjula Devi and I. Vivek Anand, "Simulation and Study of Heterojunction Device Structures with Multi-Metal Work Function Engineering," 2025 10th International Conference on Smart Structures and Systems (ICSSS), Chennai, India, 2025, pp. 1-8, doi: 10.1109/ICSSS66939.2025.11346214. (Scopus indexed)
11	Muthu lakshmi, Karuniya, Lakshmi Isvarya, Manjula Devi R "Enhanced Trapezoidal Patch Antenna for Wireless Communication Application," 2025 International Conference on Signal Processing, Computation, Electronics, Power and Telecommunication (IConSCEPT), Karaikal, India, 2025, pp. 1-5, doi: 10.1109/IConSCEPT66142.2025.11436647. (Scopus indexed)

BOOK CHAPTER PUBLISHED

1.	R. Manjula Devi; S. Dheenathayalan, "Explainable Artificial Intelligence Techniques in Deep Learning-Based Liver Tumor Analysis," in <i>Math Optimization for Artificial Intelligence: Heuristic and Metaheuristic Methods for Robotics and Machine Learning</i> , De Gruyter, 2025, pp.281-302.
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STUDENT FUNDED PROJECTS

1	NewGen IEDC, National Engineering College sponsored product entitled “Smart TENG for biomedical applications” with a total cost of Rs.2,50,000/- (2022)
2	NewGen IEDC, National Engineering College sponsored product entitled “Smart Robotic arm for drainage cleaning” with a total cost of Rs.1,00,000/- (2023)

NPTEL COURSES COMPLETED

1	Completed NPTEL course on Introduction to Research during Jan – Mar 2016 with the final score of 67%
2	Completed NPTEL course on Digital Image Processing during Jul – Oct 2016 with the final score of 87%
3	Completed NPTEL course on Medical Image Analysis during Feb - Mar 2017 with the final score of 78%
4	Completed NPTEL course on Microwave integrated circuits during Jul - Sep 2017 with the final score of 74%
5	Completed NPTEL course on Principles of Signals and Systems during Jan- Apr 2018 with the final score of 61%
6	Completed NPTEL course on Principles of Microwave Theory and Techniques during Jul - Oct 2019 with the final score of 61%
7	Completed NPTEL on course on Switching Circuits and Logic Design during Sep- Dec 2020 with the final score of 67%
8	Completed NPTEL on course on Signals and Systems during Jan - April 2021 with the final score of 80%

WORKSHOPS/SEMINARS/CONFERENCES/TRAINING PROGRAMMES ATTENDED

S.NO.	NAME OF THE PROGRAMME & VENUE	DATES WITH DURATION	NO. OF PARTICIPANTS	RESPONSIBILITY
1.	Two days workshop on “Graphical System Design for Engineering Applications Using Labview” conducted at National Engineering College	23.012010 to 26.11.2010	25	PARTICIPANT

2.	One day workshop on “Methodologies for Research & Innovaions” conducted at National Engineering College	18.03.2011	30	PARTICIPANT
3.	Four days Faculty Training Programme on “Train the Trainers” conducted at National Engineering College	20.12.2011 to 23.11.2011	25	PARTICIPANT
4.	One day seminar on “SCADA and its Recent Trends” conducted at National Engineering College	18.04.2014	50	PARTICIPANT
5.	TEQIP Sponsored two days National Workshop on “Computer Vision and Medical Image Processing: A Practical Approach Using Matlab” organized at Thiagarajar college of Engineering	25.04.2014 to 26.04.2014	30	PARTICIPANT
6.	One day seminar on “Antennas” organized by IEEE Madras Chapter	18.10.20114	25	PARTICIPANT
7.	17 th ISTE TN & P section Annual Convention for Faculty member for “Empowering India Engineering Education for Global Expectations” conducted at National Engineering College.	07.11.2014 to 08.11.2014	100	PARTICIPANT
8.	One day NPTEL workshop organized by IIT madras	13.03.2015	25	PARTICIPANT
9.	Two days technical seminar on “Video Analytics” conducted at Mepco Schlenk Engineering College	18.09.2015 to 19.09.2015	20	PARTICIPANT
10.	Faculty Development Training Programme on “VLSI Design” at National Engineering College.	01.12.2015 to 08.12.2015	25	PARTICIPANT
11.	DBT Sponsored two days workshop on “Modern Computing Technologies for Affective Brain Computer Interface” at National Engineering College.	08.01.2016 to 09.01.2016	25	PARTICIPANT
12.	AICTE Sponsored Short term course on “Medical Imaging and Informatics” at Coimbatore Institute of Technology, Coimbatore	20.04.2016 to 26.04.2016	30	PARTICIPANT
13.	Quality Improvement Training programme on “Technology Enabled Teaching Learning Process” conducted at National Engineering College, Kovilpatti	27.05.2017 to 29.05.2017	30	PARTICIPANT
14.	Workshop on “Deep Learning – Academic and Research Prospectives” conducted by PSG college of Technology, Coimbatore.	24.01.2018 to 25.01.2018	50	PARTICIPANT

15.	AICTE approved FDP on Foundation Program in ICT for Education Conducted by IIT Bombay	08.03.2018 to 12.04.2018	25	PARTICIPANT
16.	AICTE approved FDP on Pedagogy for online and Blended Teaching – Learning Process Conducted by IIT Bombay	03.05.2018 to 30.05.2018	25	PARTICIPANT
17.	Gian course on “Medical Image Computing: Machine –learning methods and Advanced-MRI applications Conducted at IIT Bombay	23.07.2018 to 27.07.2018	100	PARTICIPANT
18.	Research issues and innovation in Medical Imaging Modalities and Processing system for Health care applications	14.11.2019 to 16.11.2019	30	PARTICIPANT
19.	NPTEL –AICTE Faculty Development Programme on “Microwave Theory and Techniques”	July to Oct 2019 (2 week)	103	PARTICIPANT
20.	Machine Learning & Applications	24.08.2020 to 28.08.2020	150	PARTICIPANT
21.	Medical image processing and deep learning technologies	21.09.2020 to 25.09.2020	125	PARTICIPANT
22.	Research issues and challenges in Deep learning based Medical image analysis and medical diagnosis	19.10.2020 to 24.10.2020	150	PARTICIPANT
23.	DEEP LEARNING&ITSAPPLICATIONS :THEORYTOPRACTICE	06.07.2020 to 10.07.2020	75	PARTICIPANT
24.	CONVOLUTIONAL NEURAL NETWORK IN DEEP LEARNING	15.07.2020	150	PARTICIPANT
25.	Artificial intelligence in Health Care	16.07.2020 to 22.07.2020	125	PARTICIPANT
26.	Machine Learning & Applications	24.08.2021 to 28.08.2021	130	PARTICIPANT
27.	MEDICAL IMAGE PROCESSING AND DEEP LEARNING TECHNOLOGIES	21.09.2021 to 25.09.2021	135	PARTICIPANT
28	Research issues and challenges in deep learning based medical image analysis and diagnosis	19.10.2020 to 24.10.2020	125	PARTICIPANT
29	Soft computing	22.06.2020 to 26.06.2020	350	PARTICIPANT

30	Deep learning	13.12.2021 to 17.12.2021	35	PARTICIPANT
31	Exploring Transformative Applications of Machine Learning: Innovations in Healthcare, Drug Discovery, Agriculture, and Hands-On Tool Proficiency	11.12.2023 to 16.12.2023	70	PARTICIPANT
32	Intelligent Signal Processing Techniques	9.12.2024 to 15.12.2024	50	PARTICIPANT
33	Computer vision technology for biomechanics applications	01.12.2025 to 06.12.2025	65	PARTICIPANT

Industrial Training Attended

1.	Undergone 5 days industrial training at Enginef technologies Private Limited, Trivandrum during the period 19.11.2018 to 22.11.2018
2.	Undergone 3 days industrial training at DEBEL Lab, DRDO, Bangalore during the period 06.02.2019 to 08.02.2019
3.	Undergone one month industrial training on “Design and verification using verilog” at Entuple Technologies, Bangalore during the period 28.10.2020 to 30.11.2020
4.	Undergone one month industrial training on “Electromagnetic and simulation using HFSS” at Entuple Technologies, Bangalore during the period 14.09.2021 to 17.10.2021

MEMBERSHIP DETAILS

1	Indian Society for Technical Education(ISTE) - Life Member-LM98293
2	Institution of Electronics and Telecommunication Engineers(IETE) - Associate Member-AM223376