


Name:	Dr. R. Nagaraj			
Designation:	Associate Professor CSE (AI&ML)			
Qualification:	B.E., M.E., Ph. D			
Area of specialization:	Artificial Intelligence, Machine Learning, Deep Learning, Remote Sensing, Internet of Things, Signal and Image Processing			
Experience : (As on May 2024)	Industrial	Research	Teaching Experience	
	-	3 Years	7 Years	
Number of workshop / FDP attended:	Number of Workshops		Number of FDPs	
	5		5	
Publications:	Conference		Journal	
	National	International	National	International
	3	4	-	6
Patents:	National		International	
	-		-	
Professional Body Membership:	<ul style="list-style-type: none"> • Life member in THE INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE) – LM 131798 • Member in Institute of Electrical and Electronics Engineers (IEEE), 93153341 • Member in Computer Society of India (CSI) 			
Achievements:	<ul style="list-style-type: none"> • University Rank Holder (16th) in M.E-Applied Electronics • Awarded as “Best faculty coordinator” by RoboZest’16 in association with IIT Kharagpur. • Secured Topper 5% in Microprocessor and Microcontroller course conducted by NPTEL. • Secured Topper 5% in Modern Digital Communication Techniques course conducted by NPTEL. • Secured Topper 5% in Digital Circuits course conducted by NPTEL. • Secured Topper 1% in Python for Data Science course conducted by NPTEL. • Secured Topper 1% in Introduction to Machine Learning IITKGP course conducted by NPTEL. 			

Publication in Conferences:

1. Nagaraj Rajendiran and Lakshmi Sutha Kumar. "Performance analysis of machine learning techniques for water body extraction." 2021 IEEE Bombay Section Signature Conference (IBSSC). IEEE, 2021.
2. Nagaraj et al. "Surface water mapping and volume estimation of Lake Victoria using Machine Learning Algorithms." 2023 International Conference on Signal Processing, Computation, Electronics, Power and Telecommunication (IConSCEPT). IEEE, 2023.
3. Nagaraj Rajendiran and Lakshmi Sutha Kumar. "Surface water body extraction and Change Detection Analysis using Machine Learning Algorithms: A Case study of Vaigai Dam, India." 2023 International Conference on Signal Processing, Computation, Electronics, Power and Telecommunication (IConSCEPT). IEEE, 2023.
4. Nagaraj Rajendiran, Pragathi Mosuganti, Amy Eunice and Lakshmi sutha kumar, "Performance Analysis of Machine learning Algorithm for Flood Prediction." National Conference of Communication Systems (NCOCS-2021), organized by National Institute of Technology Puducherry, on 25th December, 2021.
5. Nagaraj Rajendiran et al. "An intelligent Intrusion Detection and food grain preservation system based on ARM." 2016 International Journal of Advanced Research Trends in Engineering and Technology (IJARTET). 3. 201-206.
6. Nagaraj Rajendiran et al. "Automatic continuity checking of power transmission lines with spot intimation." 2016 International Journal of Advanced Research Trends in Engineering and Technology (IJARTET). 3. 63-68.
7. Nagaraj Rajendiran and Lakshmi Sutha Kumar, "Surface Water Mapping Using Machine Learning and Deep Learning Techniques from LISS-III Imagery," 2024 International Conference on Signal Processing, Computation, Electronics, Power and Telecommunication (IConSCEPT), IEEE, 2024.

Publication in Journals:

1. Nagaraj Rajendiran, and Lakshmi Sutha Kumar. "Pixel level feature extraction and machine learning classification for water body extraction." Arabian Journal for Science and Engineering 48.8 (2023): 9905-9928 (Indexed-SCI, Impact Factor: 2.9).
2. Nagaraj Rajendiran, and Lakshmi Sutha Kumar. "Multi scale feature extraction network with machine learning algorithms for water body extraction from remote sensing images." International Journal of Remote Sensing 43.17 (2022): 6349-6387 (Indexed-SCI, Impact Factor: 3.53).
3. Nagaraj Rajendiran, and Lakshmi Sutha Kumar. "LWAMNNet: A novel deep learning framework for surface water body extraction from LISS-III satellite images." Earth Science Informatics 17.1(2024): 561-592 (Indexed-SCI, Impact Factor: 2.8).
4. Nagaraj Rajendiran, and Lakshmi Sutha Kumar. "Extraction of Surface Water Bodies using Optical Remote Sensing Images: A Review." Earth Science Informatics (2024): 1-64 (Indexed-SCI, Impact Factor: 2.8).
5. Nagaraj Rajendiran, and Lakshmi Sutha Kumar. "Univariate Deep Learning models for prediction of daily average temperature and Relative Humidity: The case study of Chennai, India." Journal of Earth System Science 132.3 (2023): 100 (Indexed-SCI, Impact Factor: 2.0).
6. Nagaraj Rajendiran, Sruthy Sebastian, and Lakshmi Sutha Kumar. "Cloud Segmentation, Validation of Weather Data, and Precipitation Prediction Using Machine Learning Algorithms." Arabian Journal for Science and Engineering (2024): 1-31 (Indexed-SCI, Impact Factor: 2.9).

Workshop/FDP Details:

1. Participated FDP on the Topic “Entrepreneurship”, organized by Anna University, Chennai.
2. Participated FDP on the topic “The Internet of Things (Using Raspberry PI)”, organized by Sree Sastha Institute of Engineering and Technology.
3. Participated in E-yantra Workshop “Introduction to Robotics”, organized by SCSVMV University Kanchipuram.
4. Participated FDP on the topic “Recent Trends & Tools in Modern Wireless & Digital Communication Networks”, organized by SCSVMV University, Kanchipuram.
5. Participated in FDP on the topic “Embedded systems with ARM7 Microcontroller”, organized by Sai Ram Engineering College, Chennai.
6. Participated in FDP on the topic “Building Embedded systems with ARM cortex-M MCU’s”, organized by Saveetha Engineering college, Chennai.
7. Participated in National Level Workshop entitled “CNC Machines and Robotics”, organized by Anna University, Chennai.
8. Participated in 5 Days online Workshop on “Recent Algorithms for Remote Sensing Applications (RARSA 2022)”, organized by NITK, Surathkal, India.
9. Participated in 2 Days online Workshop on “Synthetic Aperture Radar data analysis and applications”, organized by MIT Manipal.
10. Participated in two weeks summer course on “Machine and Deep Learning for Remote Sensing Applications”, organized by NITK, Surathkal, India.

Additional Details:

1. Reviewer of International Journal of Digital Earth.
2. Reviewer of Journal of Applied Remote Sensing.
3. Reviewer of International conference on signal processing, commutation, Electronics, Power and Telecommunication-IEEE Conference.
4. Reviewer of International conference on Communication Systems-Scopus Indexed.
5. Completed course on Linear Circuits-2:AC Analysis, UCI in Coursera.
6. Completed course on The Arduino Programming & C-programming, UCI in Coursera.
7. Completed course on Introduction to IoT and Embedded Systems. UCI. in Coursera.
8. Completed course on Introduction to Programming with MATLAB, Vanderbilt University. in Coursera.
9. Completed course on Introduction to Solar Cell, in Coursera.
10. Completed course on Basic Electronics, NPTEL.
11. Completed course on Digital image Processing for Remote sensing data, NPTEL.
12. Completed course on Modern Digital Communication Techniques, NPTEL.
13. Completed course on Microprocessor and Microcontrollers, NPTEL.
14. Completed course on Basic Circuit Analysis, Massachusetts Institute of Technology, in Edx.
15. Completed course on Introduction to Machine Learning IITKGP, NPTEL.
16. Completed course on Python for Data Science, NPTEL.