




JSS Mahavidyapeetha
JSS Academy of Technical Education, Bengaluru
Department of Electronics & Communication Engineering



FACULTY PROFILE

1. Personal Details

NAME	Dr. Mahendra H N	
DEPARTMENT	Electronics & Communication Engineering	
DESIGNATION	Assistant Professor	
PHONE	+91 9740129884	
EMAIL ID	mahendrah@jssateb.ac.in	
TEACHING EXPERIENCE	15	
INDUSTRY EXPERIENCE	NIL	
RESEARCH EXPERIENCE	6	

2. Qualification

COURSES	SPECIALIZATION	INSTITUTION	UNIVERSITY
Ph.D.	Digital Image Processing and VLSI	JSS Academy of Technical Education	Visvesvaraya Technological University, Belagavi
M.Tech	Digital Electronics and Communication	NMAM Institute of Technology, Nitte, Udupi.	Visvesvaraya Technological University, Belagavi
BE	Telecommunication Engineering	Coorg Institute of Technology, Ponnampet	Visvesvaraya Technological University, Belagavi.
Diploma	Electronics and Communication	JSS Polytechnic, Nanjangud	DTE, Karnataka
SSLC		JSS High School, Ummathur	Karnataka Secondary Education

3. Membership of Professional Bodies:

1. The Institution of Engineers India (IEI)

4. Awards

Award Title	Date of receiving the award	Award issuing authority/ Body / Organization
Guide Recognition Certificate	15/05/2016	Science Society of India

5. Publications (Journals)

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1.	LULC change detection analysis of Chamara Nagar district, Karnataka state, India using CNN-based deep learning method	H.N. Mahendra, V. Pushpalatha, S. Mallikarjunaswamy, S. Rama Subramoniam, Arjun Sunil Rao, N. Sharmila	Advances in Space Research	Volume 74, Issue 12, 15 December 2024, Pages 6384-6408	Both Q1	2.8	Elsevier

2.	Land use and land cover classification for change detection studies using convolutional neural network	V. Pushpalatha, P.B. Mallikarjuna, H.N. Mahendra , S. Rama Subramoniam, S. Mallikarjunaswamy	Applied Computing and Geosciences	Volume 25, February 2025, 100227	Both Q1	2.6	Elsevier
3.	An assessment of vegetation cover of Mysuru City, Karnataka State, India, using deep convolutional neural networks	Mahendra, H.N, Mallikarjunaswamy, S. and S Rama Subramoniam	Environmental Monitoring Assessment,	195, 526 (2023)	Both Q2	3.1	Springer
4.	An assessment of built-up cover using geospatial techniques – a case study on Mysuru district, Karnataka state, India	Mahendra H.N, Mallikarjunaswamy, S, and Sudalayandi Rama Subramoniam	Int. J. Environmental Technology and Management	Vol.26, No.3-5, pp173-188, 2023	Both	0.6	Inderscience
5.	An analysis of change detection in land use land cover area of remotely sensed data using supervised classifier	Mahendra, H. N., and Mallikarjunaswamy, S	Int. J. Environmental Technology and Management		Both	0.6	Inderscience
6.	An Efficient Classification of Hyperspectral Remotely Sensed Data Using Support Vector Machine	Mahendra, H. N., and Mallikarjunaswamy, S,	International Journal of Electronics and Telecommunications	, Vol. 68, No. 3, pp. 609-617	Both	1.2	Polish Academy of Sciences
7.	LULC classification for change detection analysis of remotely sensed data using machine learning-based random forest classifier	HN MAHENDRA, V Pushpalatha, V Rekha, N Sharmila, D Mahesh Kumar, GS Pavithra, NM Basavaraju, S Mallikarjunaswamy	Nature Environment and Pollution Technology	2025	Scopus	0.2	Technoscience
8.	Assessment and Prediction of Air Quality Level Using ARIMA Model: A Case Study of Surat City, Gujarat State, India	Mahendra, H.N., Mallikarjunaswamy, S., Mahesh Kumar, D. Fulwani, S.	Nature Environment and Pollution Technology	2023, 22(1), pp. 199–210.	Scopus No. 4 pp. 2211-2219 2024	0.2	Technoscience
9.	An Assessment of Land Use Land Cover Using Machine Learning Technique	V. Pushpalatha ¹ , H. N. Mahendra, A. M. Prasad, N. Sharmila, D. Mahesh Kumar, N. M. Basavaraju, G. S. Pavithra and S. Mallikarjunaswamy	Nature Environment and Pollution Technology	Vol. 23			Technoscience
	Evolution of real-time onboard processing and classification of remotely sensed data	H N Mahendra, S Mallikarjunaswamy , G K Siddesh , M Komala , N Sharmila	INDIAN JOURNAL OF SCIENCE AND TECHNOLOGY	Volume:13, Issue: 20 Year-2020	WOS	0.66	Indian Society for Education and Environment
10.	Performance Analysis of Different Classifier for Remote Sensing Application	Mahendra H N, Mallikarjunaswamy S, Rekha V, Puspallatha V, Sharmila N	International Journal of Engineering and Advanced Technology	Volume-9 Issue-1, Year-2019	Scopus	1.85	Blue Eyes Intelligence Engineering & Sciences Publication

11.	Implementation of an effective hybrid model for islanded microgrid energy management	S Mallikarjunaswamy, N Sharmila, D Maheshkumar, M Komala, H N Mahendra	INDIAN JOURNAL OF SCIENCE AND TECHNOLOGY	Volume:13, Issue: 27 Year-2020	WOS	0.66	Indian Society for Education and Environment
12.	S Chaitra, V Mallikarjunaswamy, N Sharmila, H N Mahendra	A comprehensive review of parallel concatenation of LDPC code techniques	Indian Journal of Science and Technology.	Volume: 14, Issue: 5, Year-2021	WOS	0.66	Indian Society for Education and Environment
13.	Pseudo Random Number Generation Based on Genetic Algorithm Application	V. Pushpalatha K. B. Sudeepa, H. N. Mahendra	Advances in Artificial Intelligence and Data Engineering	Year-2020	Scopus		Springer
14.	A Survey on Security Issues in Cloud Computing	Pushpalatha V, Sudeepa K B, Mahendra H N	International Journal of Engineering & Technology	Volume:7, Issue: 34 Year-2018	Scopus		Publisher of International Academic Journals
15.	Mahendra H N, Nikhil Aarya M, Shivakumar G, Vithoba M N, Yadappa H	Review on Various Multipliers Designs in VLSI	International Journal for Research in Applied Science & Engineering Technology	Volume: 6 Issue: 3 Year: 2018		6.8	JRASET
16.	Shruthi , Vinutha K. R , Anilkumar , Shiddalingesh koppal , Mahendra .HN, Mallikarjunaswamy S	Design of a Multiplier using Low Power High Speed Hybrid Full Adder	International Journal of Engineering Science and Computing	Volume: 7 Issue: 5 Year: 2017			IJESC
17.	Shivaleela.G, Praveen.J, Mahendra.HN,Nithya G	Comparative Study on Capacitive Pressure Sensor for Structural Health Monitoring Applications with Coventorware	International Research Journal of Engineering and Technology	Volume:7 Issue: 5 Year: 2017		5.1	IRJET
18.	Mahendra H N Mallikarjunaswamy S, Komala M	A Review on Full Adder Design Techniques	International Journal of Advanced Scientific and Technical Research	Volume:3 Issue: 6 Year: 2016			RS Publication

Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
1.	Cloud based centralized smart cart and contactless billing system	HN Mahendra, S Mallikarjunaswamy, Chandan B Nooli, M Hrishikesh, N Kruthik, Havish Manikya Vakkalanka	2022 7th international conference on communication and electronics systems (ICCES)				IEEE
2.	Deep learning models for inventory of agriculture crops and yield production using satellite images	HN Mahendra, S Mallikarjunaswamy, NM Basavaraju, Pratheek M Poojary, Pavankumar S Gowda, M Mukunda, B Navya, V Pushpalatha	2022 IEEE 2nd Mysore Sub Section International Conference (MysuruCon)				IEEE
3.	Comprehensive analysis on vehicle-to-vehicle communication using intelligent transportation system	GS Pavithra, S Pooja, V Rekha, HN Mahendra, N Sharmila, S Mallikarjunaswamy	International Conference on Soft Computing for Security Applications				IEEE
4.	An efficient big data gathering in wireless sensor network using reconfigurable node distribution algorithm	S Mallikarjunaswamy, NM Basavaraju, N Sharmila, HN Mahendra, S Pooja, BL Deepak	2022 Fourth International Conference on Cognitive Computing and Information Processing (CCIP)				IEEE
5.	Enhancing Crop Yield and Growth Prediction Using IoT-Based Smart Irrigation Systems and Machine Learning Algorithms	S Mallikarjunaswamy, BL Deepak, GS Pavithra, Sadiya Thazeen, M Komala, HN Mahendra	2024 Second International Conference on Networks, Multimedia and Information Technology (NMITCON)				IEEE
6.	Application of Remote Sensing in Development of Renewable Energy	Mahendra H N, Mallikarjunaswamy S, Siddesh G K and Pushapalatha V	Proceedings of international conference	--	--		BlueRose Publishers
7.	Design of Low Power High Speed Area Efficient Wallace Tree Multiplier using Ripple Carry	Mahendra H N, Mallikarjunaswamy S, Mahesh Kumar D, Sharmila	Proceedings of international conference	--	--		
8.	Pixel-Based Classification of Multispectral Remotely Sensed Data Using Support Vector Machine Classifier	Mahendra H N, Shivakumar BR, Praveen J	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering	Volume:3, Issue: 1 Year-2015			Tejass Publisheers

6. Grants/Funding Received

Grant Amount	Project Name	Date of receiving the Grant	Grant issuing authority/ Body / Organization
7.5 Lakhs	Science and Technology Entrepreneurship and Innovation	2024	DST
3 Lakhs	International Conference	2024	AICTE
5500	Cloud Based Centralized Smart Cart and Contactless Billing System	23rd April 2021	KSCST, Bangalore

6. Others :Workshops / Conference (Orgained/Attended)**6.a. Workshops / Conference organized**

SI No.	Title/topic	Year & Duration	Funded by	Organizers
1	National Conference on Microelectronics	15 th and 16 th February 2013	AIET, Moodbidri	AIET, Moodbidri
2	Workshop on VLSI Cadence Tool	11 th and 12 th August 2014	AIET, Moodbidri	AIET, Moodbidri
3	Faculty Development Program on Industrial Digital Design with Verilog HDL	23 rd and 24 th December 2014	AIET, Moodbidri	AIET, Moodbidri
4	Faculty Development Program on Advanced Industrial Automation	18 th and 19 th Jan 2016	AIET, Moodbidri	AIET, Moodbidri
5	Certificate and Training Program on Mobile Communications	3 rd Aug to 8 th Aug 2015	AIET, Moodbidri	AIET, Moodbidri
6	Faculty Development Program on MEMS	16 th Jan to 19 th Jan 2017	AIET, Moodbidri	AIET, Moodbidri
7	Faculty Development Program on ARM Controller	16 th Jan to 20 th Jan 2018	AIET, Moodbidri	AIET, Moodbidri
8	Workshop on LaTeX and Research Methodologies	22nd Jan to 24th Jan 2018	AIET, Moodbidri	AIET, Moodbidri
9	Webinar on “Geo-Spatial Technology applications”	30th June 2020	JSSATE Bangalore	JSSATE Bangalore

6.b. Conference Attended (those sponsored by AICTE / ISTE/IETE/TEQIP or any other sponsoring body)

SI. No.	Name of the workshop / Conference	Organiser	Date
1	International Conference On “Recent Advances On Renewable Energy (Rare-2020)”	National Institute of Technology Karnataka Surathkal,	7 th - 9 th FEB, 2020
2	International Conference On Intelligent Control And Computation For Smart Energy And Mechatronic Systems	JSS Academy of Technical Education, Noida	25 th – 26 th SEP 2020
3	Workshop on R Programming	SJCE, Mysore	9 th Nov 2019
4	National Conference on Microelectronics	AIET, Moodbidri	15 th -16 th Feb 2013

6.c. workshop/ Seminar /Conference Attended (those NOT sponsored by AICTE / ISTE/IETE/TEQIP or any other sponsoring body)

Sl. No.	Name of training/workshop	Year/ duration	Organization	No. of days
1	ATAL FDP Novel Materials	17 th -21 st August 2020	Government college of Engineering, Thanjavur	One week
2	ATAL FDP Green Technology & Sustainability Engineering	14 th -18 th September 2020	National Institute of Technology Jamshedpur.	one week
3	Workshop on R	9th Nov 2019	SJCE, Mysore	one
4	Two Week FDP on Python	22nd June- 4th July 2020	JSS Academy of Technical Education, Noida	Two week
5	FDP on Usage of Technology in COVID-19	28th May- 2nd June 2020	Terna Engineering College, Navi Mumbai	one week
6	FDP on Solar Energy –The Future is Bright	25th - 29th June 2020	Reva University Bengaluru	one week
7	Certificate Course on Remote sensing and GIS Technology and Application for University Teachers	13 th June- 1 st July 2020	IIRS-ISRO	3 Weeks
8	Satellite Photogrammetry and its Application	29-06-2020 to 03-07-2020	IIRS-ISRO	one week
9	Biomedical Signal Analysis and Machine Learning (BSAML),	11th 15th January 2021	National Institute of Technology Calicut	one week
10	Workshop on Soil and Biodiversity	6 th to 7 th March 2018	AIET, Moodbidri	02
11	Workshop on LaTeX and Research Methodologies	22 nd Jan to 24 th Jan 2018	AIET, Moodbidri	03
12	Faculty Development Program on ARM Controller	16 th Jan to 20 th Jan 2018	AIET, Moodbidri	05
13	FDP on Entrepreneurship Development	29 th Dec 20117 to 02 nd Jan 2018	SJBIT, Banaglore	05
14	FDP on Entrepreneurship Development	17 th July to 27 th July 2017	AIET, Moodbidri	11
15	Faculty Development Program on MEMS	16 th Jan to 19 th Jan 2017	AIET, Moodbidri	04
16	Faculty Development Program on Advanced Industrial Automation	18 th and 19 th Jan 2016	AIET, Moodbidri	02
17	Faculty Development Program on FPGA and ASIC design flow using Mentor Graphics tool	15 th and 16 th Aug 2015	Dr.MVSIT, Moodbidri	02
18	Faculty Development Program on Industrial Digital Design with Verilog HDL	23 rd and 24 th December 2014	AIET, Moodbidri	02
19	Workshop on VLSI Cadence Tool	11 th and 12 th August 2014	AIET, Moodbidri	02
20	Faculty Development Program on ARM7 Processor	15 th and 16 th February 2014	AIET, Moodbidri	02
21	Workshop on Mentor Graphics Tool	1 st Aug and 2 nd Aug 2013	SJCE, Vamanjoor	02
22	National Conference on Microelectronics	15 th and 16 th February 2013	AIET, Moodbidri	02
23	Faculty Development Program on Teaching Pedagogy	23 rd and 24 th January 2013	AIET, Moodbidri	02
24	Faculty Development Program on Analog System design	12 th and 13 th July 2011	VVIET, Mysore	02

6.d. PROJECT / Innovations/Patents

An Efficient Approach for Secured Power Management System Using Machine Learning in Smart Grid". under competitive research grants, sponsored by TEQIP CELL, VTU.

6.e. Any other information you will like to share about your professional experience

Details of NPTEL / COURSERA courses completed

Sl. No.	Name of the subject	Organised by	Date of completion / Award	Grade / Marks
1	Embedded System Design with ARM	NPTEL	26/03/2020	89%
2	Computer Networks and Internet Protocol	NPTEL	25/04/2020	98%
3	Introduction to TCP/IP	COURSERA	15/05/2020	100%
4	Mathematical Foundations for Cryptography	COURSERA	22/05/2020	98%
5	Machine Learning for All	COURSERA	24/05/2020	100%
6	Hardware description language for FPGA design	COURSERA	17/08/2020	95%
7	FPGA computing systems	COURSERA	20/05/2020	100%
8	Introduction to Machine learning	COURSERA	04/07/2020	91%