


FACULTYPROFILE

Name of the Faculty:		B.Chandra Mohan				
Designation:		Professor & Head				
Department:		Electronics and Communication Engineering				
Date of Birth:		24/05/1968				
AICTE- ID:		1-437253574				
Education		<ul style="list-style-type: none"> B.Tech in ECE from Nagarjuna University, Bapatla Engg College in 1990 M.Tech in Radar & Microwave Engineering Specialization from Cochin University of Science & Technology, Cochin in 1992 PhD in Image Watermarking specialization from JNTU Hyderabad University in 2008 				
Experience		Teaching: 31 Years	Industry: Nil		Total:31 Years	
		Research: 17 Years	Others: Nil			
Research Specialization		Image Processing Machine Learning Deep Learning				
Courses taught		<ol style="list-style-type: none"> 1. Digital Image Processing 2. Machine Learning 3. Electromagnetic Field Theory 4. Wireless Communication 				
Research contributions						
International/national peer reviewed journals						
S. No.	Title of paper	Journal	Year	Volume	pages	Indexing SCI/WoS/ SCOPUS, Google scholar)
1.	A Novel Technique for Image Retrieval based on Concatenated Features Extracted from Big Dataset Pre-Trained CNNs	Image Graphics and Signal Processing	2023		1-12	Scopus

2.	"Calibration of Mismatches in Time-Interleaved ADCs Using Teacher Learner-Based Optimization Algorithm". Journal of Circuits, Systems and Computers.	Journal of Circuits, Systems and Computers	2022	31		Scopus SCIE
3.	"Optimization Algorithms based compensation of mismatches in Time interleaved Analog to Digital Converters-A Review".	International Journal of Electrical and Computer Engineering Systems	2022	13(3)		ESCI Scopus
4.	Virus Texture Classification of Tem Images Using fusion of Chebychev Moments and Resnet50 features	Brazilian Archives of Biology and Technology	2022			Scopus SCIE
5.	Calibration of offsets in Time Interleaved ADCs in an OFDM receiver using differential evolution algorithm, ,	Optoelectronics, Instrumentation and Data Processing	2021	57	287-296	SCOPUS ESCI
6.	"Fuzzy based scheduling and load balancing for zone routing protocol (ZRP) in mobile adhoc networks",	Journal of Critical Reviews	2020	7		Scopus
7.	"Load and Energy Aware Adaptive Zone Routing Protocol for MANET", ,	International Journal of Advanced Science and Technology	2020	29		Scopus
8.	Multimodal Medical Image Fusion Techniques – A Review	Journal of Current Signal Transduction Therapy	2020			SCOPUS
9.	"Sparse Bayesian Learning Assisted Approaches for Road Network Traffic State Estimation	", IEEE Transactions on Intelligent Transportation Systems	2020			SCI
10.	Advanced and Distributed Relative Segment and Opportunistic Routing for Congestion Control and Traffic Management in	Journal of Advanced Research in Dynamical & Control	2018	10		SCOPUS

	MANET", Systems					
11.	Extensive survey of Hybrid Routing Protocols in MANET	International Journal of Engineering Research in Computer Science and Engineering	2018	5		SCOPUS
12.	A triple frequency vertex fed antenna for worldwide wireless and microwave access interoperability	IEEE Antenna and Propagation Magazine	2018			SCI
13.	Miniaturization of a microstrip antenna using partially loaded non uniform meta surfaces with a metamaterial for indoor wireless applications	IEEE Antenna and Propagation Magazine	2018			SCI
14.	A Large Random Matrix based Channel Estimation for Massive MIMO OFDM Uplink	IET Communications,	2018			SCI
15.	Multimodal medical image fusion based on Yager's intuitionistic fuzzy sets	Iranian Journal of Fuzzy Systems.	2018			SCI
16.	secret image sharing using eigen values and vectors	Journal of Information and Optimization Sciences	2017			SCI
17.	Weighed noise threshold based channel estimation for OFDM Systems	SADHANA	2017			SCI
18.	Multimodal medical image fusion based on Sugeno's intuitionistic fuzzy sets	ETRI Journal (Electronics and Telecommunications Research Institute)	2017	39	173-180	SCI
19.	Classification of benign and malignant masses using Bandelet and Ripplet type II Transform",	Computer methods in Biomedical and Biomechanics: Imaging and Visualization	2017			SCI
20.	A survey on denoising threshold based channel estimation	Journal of Engineering	2017			SCI

	algorithms for OFDM	Science and Technology				
21.	<u>Steganography based image sharing with reversibility</u> ”, Taylor & Francis publication, vol.19, no.1, 2016, pp.67-80.	Journal of Discrete Mathematical Sciences and Cryptography,	2016	19	67-80	SCIE
22.	Identification of cheaters in elections using steganography	Journal of Information and Optimization Sciences	2016	37	271-280	SCOPUS
23.	An eigen-select denoising threshold for channel estimation in OFDM systems	International Journal of Communication Systems	2015			SCI
24.	A pilot aided channel estimator using DFT based time interpolator for massive MIMO-OFDM systems	Journal AEU - International Journal of Electronics and Communications	2015	69	321-327	SCI
25.	The performance of a hybrid routing intelligent algorithm in Mobile Adhoc Network	” Journal of Computer and Electrical Engineering	2014	40	1255-1264	SCI
26.	On the comparison of various overhead arrangements for massive MIMO-OFDM channel estimation	International Journal of Electronics and Telecommunications,	2014	60	173-179	SCI
27.	Optimization Algorithms based compensation of mismatches in Time interleaved Analog to Digital Converters-A Review	International journal of electrical and computer engineering systems	2022	13	237-244	SCOPUS
28.	Fuzzy based scheduling and load balancing for zone routing protocol (ZRP) in mobile adhoc networks	Journal of Critical Reviews	2020	7		
29.	”Advanced and Distributed Relative Segment and Opportunistic Routing for Congestion Control and Traffic Management in	Journal of Advanced Research in Dynamical & Control	2018	10		SCOPUS

	MANET",," Vol.10, special issue , 2018	Systems				
30.	Extensive survey of Hybrid Routing Protocols in MANET	International Journal of Engineering Research in Computer Science and Engineering	2018	5		SCOPUS

Books published

S. No.	Title of the book	Publisher	year
1	Wireless and Mobile Adhoc Networks ISBN: 978-93-5747-037-7,	Iterative International Publishers, Karnataka	2023
2	Electronic Devices and Circuits	Mahi Publications	2022
3	Medical Image Fusion using UDWT, Fuzzy Sets and Optimization Techniques", ISBN 978-620-0-22682-2	LAP LAMBERT Academic Publishing	2019
4	A Monograph on Digital Image Watermarking ISBN:10: 3659106666,ISBN-13: 978-3659106668	LAP LAMBERT Academic Publishing	2012

Book chapters Published

S.No.	Title of the Chapter	Book title	Publisher	year
1.	Virus Texture Classification using Genetic Algorithm and Pre-trained Convolutional Neural Networks	Proceedings in Mathematics & Statistics, March 2022	Springer	2022
2.	Forest Fire Detection from UAV Images Using Fusion of Pre-trained Mobile CNN Features", Springer Cham	Wings for Sustainability Lecture Notes in Civil Engineering	Springer Cham	2023
3.	Estimation of sampling time offsets in an N-channel time-interleaved ADC network using differential evolution algorithm and correction using fractional delay filters",.	Advances in Intelligent Systems and Computing	Springer Nature	2019
4.	Multimodal Medical Image Fusion Based on Fuzzy sets with Orthogonal Teaching-Learning Based Optimization	Computational Intelligence Theory	Springer	2019

		Applications and Future Directions –Vol II		
5.	Multiclass Colorectal Texture Classification Using Ensemble of Pre-trained Networks.	Soft Computing for Problem Solving. Advances in Intelligent Systems and Computing,	Springer, Singapore	2021

Details of Patents (Filed & Granted)

S. No.	Applications number	Title of the patent	Date of filing/publishing	Published/granted
1	R20234030934	A Novel Technique for Mitigation of Interference in Massive MU-MIMO system	04/08/2023	Published

Details of Conferences/FDPs/STTPs/webinars/Workshops Organized

S.No.	Name of the event	Role	Dates
1			

Details of Conferences/FDPs/STTPs/webinars/Workshops Participated

S.No.	Name of the event	Organized by	Dates
1.	B.Chandra Mohan, “Microstructure Classification of Ultra High Carbon Steel Using Deep Learning Approach”, Processing and Fabrication of Advanced Materials, PFAM 2023, Indian Institute of Technology, Tirupathi, (IIT Tirupathi), 06-08, September 2023.	IIT Tirupathi	2023
2.	B.Chandra Mohan, “Ear Drum Disease Classification using Convolutional Neural Networks and Aquila Optimizer”, ICCCNT2023, Indian Institute of Delhi, (IIT Delhi), July 6-8, 2023,	IIT Delhi	2023
3.	B.Chandra Mohan, “Orthogonal Moments for Malware Classification”, NSMA 2022, Dec 22, 2022, IIT	IIT Chennai	2022

	Chennai		
4.	Virus texture classification using genetic algorithm and pre-trained convolution neural networks”, authored by “Dr B.Chandra Mohan presented in session in ICMLBDA-2022 organized by IIT PATNA. March 29-30, 2022.	IIT Patna	2022
5.	"B.Chandra Mohan, A deep learning approach for waste object classification using transfer learning and meta heuristic algorithm ”, authored by “Dr B.Chandra Mohan presented in session in ICESE-2022 organized by IIT Bombay. January 20-22, 2022.	IIT Bombay	2022
6.	B.Chandra Mohan, Infrared Solar Module Defect Classification using Convolution neural Networks and SMOTE Ensembles, ICFME, Dec 16-18,2022,	IIT Indore	2022
7.	B.Chandra Mohan, “Forest Fire Detection from UAVImages using Fusion of Pre-trained Mobile CNN Features”2 nd international conference on Unmanned Aerial System in Geomatics”, April2-4, 2021,	IIT Roorkee	2021
8.	B.Chandra Mohan, Parkinson Disease Detection from spirals and wave drawings using sequential model Selection, ICNAAO, 2021, Dec21-23, IIT BHU	IIT BHU	2021
9.	B.Chandra Mohan, “Osteosarcoma classification using Multilevel Feature Fusion and Ensembles, INDICON 2021, Dec 19-21, 2021 IIT Guwahati	IIT Guwahati	2021
10.	B.Chandra Mohan, “Colorectal Texture Classification using Ensemble of Pretrained Networks”, DECEMBER 18-20, 2020, IIT INDORE	IIT Indore	2020
11.	B.Chandra Mohan, K.Ramanjaneyulu, “ Childhood Medulloblastoma Classification using EfficientNets”, IBSSC-2020, IIT Bombay IEEE BombaySignature Conference,	IIT Bombay	2020

	December 4-6, 2020		
12.	B.Chandra Mohan, "An Ensemble Approach to Emphysema Classification", International Conference on Industrial and Information System (ICIIS-2020), November 26-28, 2020	IIT Ropar	2020
13.	B.Chandra Mohan, "Three Class classification of digital Mammograms using Chebyshev Moments and Convolutional Neural Network" 5 th IEEE International Conference on Computing, Communication and Security (ICCCS-2020), October 14-16, 2020	IIT Patna	2020
14.	B.Chandra Mohan, T.Krishna Chaitanya, T.Tirupal, "A Comparison of CNN vs Image Moment Feature based classification applied to MPEG-7 dataset", CMA 2019, 12-14, November, 2019, IIT Indore	IIT Indore	2019
15.	B.Chandra Mohan, T.Krishna Chaitanya, T.Tirupal, "Fast and accurate Content Based Image Classification and Retrieval using Gaussian Hermite Moments applied to COIL 20 and COIL 100", ICCCNT 2019, July 06-08, 2019, IIT Kanpur.	IIT Kanpur	2019
16.	T.Krishna Chaitanya, B.Chandra Mohan, S.Srinivas Kumar, "CNN vs Directed Acyclic Graph CNN for three class classification of MIAS dataset", INCAM 2019, July 03-05, 2019, IISc Bangalore	IISc Bangalore	2019
17.	T.Tirupal, B.Chandra Mohan, S.Srinivas Kumar, "Type-2 Fuzzy set based Multimodal Medical Image Fusion", INCAM 2019, July 03-05, 2019, IISc Bangalore	IISc Bangalore	2019
18.	G.Pratibha, B.Chandra Mohan, "Mammograms classification using Multiresolution Transforms and Convolution Neural Networks" The	IISc Bangalore	2018

	ninth International Conference on Computing, Communication and Networking Technologies, July 10-12, 2018, IISc Bangalore		
19.	T.Krishna Chaitanya, B.Chandra Mohan, "The Analysis of Digital Mammograms using HOG and GLCM Features" The ninth International Conference on Computing, Communication and Networking Technologies, July 10-12, 2018, IISc Bangalore	IISc Bangalore	2018
20.	G.Pratibha, B.Chandra Mohan, "Mammogram classification using wavelet based transforms and convolutional neural networks", emerging areas in Bio Sciences and Biomedical technologies, eBBT symposium, 05/01/2018 to 06/01/2018, IIT Indore	IIT Indore	2018
21.	T.Tirupal, B.Chandra Mohan, S.Srinivas Kumar, "Multimodal medical image fusion based on Fuzzy sets with Orthogonal Teaching Learning Based Optimization" International conference on Computational Intelligence ICCI2017, IIT Kanpur, December 6-7, 2017	IIT Kanpur	2017
22.	M.V.N.Chakravarthy, B.Chandra Mohan, "Detection and correction of sampling time errors in N channel time interleaved ADC using genetic algorithm", IEEE INDICON 2017, December 15-17, IIT Roorkee.	IIT Roorkee	2017
23.	M.V.N.Chakravarthy, B.Chandra Mohan, "Estimation of sampling time offsets in an N-channel time interleaved ADC network using differential evolution algorithm and correction using fractional delay filters", International Conference on Machine Intelligence and Signal Processing 2017, MISP 2017,	IIT Indore	2017

	December 22-24, 2017, IIT Indore		
24.	T.Tirupal, B.Chandra Mohan, S.Srinivas Kumar, "A fusion method for multimodal medical images based on fuzzy sets with teaching learning based optimization," International Conference on Advances in Scientific Computing, IITMADRAS, Chennai, India, 28-30 November, 2016.	IIT Chennai	2016
25.	T.Tirupal, B.Chandra Mohan, S.Srinivas Kumar, "Multimodal medical image fusion using Sugeno's Intuitionistic Fuzzy sets" Internal Conference on Biomaterials, Bio diagnostics, Tissue Engineering, Drug delivery, and Regenerative Medicine, Bi Term 2016, IIT Delhi, New Delhi, 15-17 April, 2016	IIT Delhi	2016
26.	P.Surendra Kumar, B.Chandra Mohan, "Dual frequency vertex fed pentagonal slot on rectangular patch for WLAN/WiMax Applications", INDICON 2016, IEEE International Conference, IISc Bangalore, December 2016 ***3 rd BEST PAPER AWARD***	IISc Bangalore	2016
27.	S.Pallavi Ram, C.Narendra Babu, B.Chandra Mohan, "Applicability of Big Data Analytics to massive MIMO systems" IEEE INDICON 2016, December 2016	IISc Bangalore	2016
28.	P.Surendra Kumar, B.Chandra Mohan, "Dual band Microstrip patch antenna design with inverted E slot and U slot" IEEE International Conference on Industrial Information Systems, ICIS organized by IIT Roorkee, December, 2016	IIT Roorkee	2016
29.	B Lakshmi Sirisha, S Srinivas Kumar, and B Chandra Mohan, " Steganography based information security with high embedding capacity " National conference on Recent Advances in Electronics & Computer Engineering (RAECE), IIT Roorkee, IEEE Publication, 2015, pp.17-21.	IIT Roorkee	2015
30.	T.Tirupal, B.Chandra Mohan,	IIT Kanpur	2015

	S.Srinivas Kumar, "Multifocus medical image fusion based on fractional lower order moments and modified spatial frequency," International Conference on Advances in Biotechnology, BIOTECH-2015, IITKANPUR, India, ISSN: 2251-2489, 13-15 March 2015, pp.145-154.		
31.	T.Tirupal, B.Chandra Mohan, S.Srinivas Kumar, "Multimodal Medical Image Fusion based on à trous Wavelet Decomposition and Contrast Visibility," 3 rd International Conference on Nanotechnology for Biological and Biomedical Applications, Nano-Bio-Med 2015, IITBOMBAY, Mumbai, India, 1-4 December, 2015.	IIT Mumbai	2015
32.	T.Tirupal, B.Chandra Mohan, S.Srinivas Kumar, "Image fusion of natural, satellite, and medical images using undecimated discrete wavelet transform and contrast visibility," National Conference on Recent Advances in Electronics & Computer Engineering, RAECE-2015, IIT ROORKEE, India, 13-15 February 2015. Published in IEEE-Xplore conference proceedings (RAECE-2015), oi:10.1109/RACE.2015.7510217	IIT Roorkee	2015
33.	G.Pratibha, B.Chandra Mohan, Breast cancer analysis using diffusion wavelet, Proceedings of the 5 th annual international conference on advances in BioTechnology, IIT Kanpur, 13-15 th March, 2015	IIT Kanpur	2015
34.	G.Pratibha, B.Chandra Mohan, Automatic Breast Cancer analysis using Bandlet transform, Proceedings of National conference on Recent Advances in Electronics and Computer Engineering, (RAECE) at IIT	IIT Roorkee	2015

	Roorkee held on 13 to 15 th February, 2015		
35.	P.Surendra Kumar, B.Chandra Mohan, " A compact design of two element MIMO antenna with improved bandwidth and isolation " International Conference on Microwave, Optical, and Communication Engineering, ICMOCE-2015, IIT Bhubaneswar, December 2015	IIT Bhubaneswar	2015
36.	P.Surendra Kumar, B.Chandra Mohan, " Performance analysis of a rectangular microstrip antenna with circular slots", National Conference on Recent advances in Electronics and Computer Engineering, RAECE-2015, IIT Roorkee	IIT Roorkee	2015
37.	T.Tirupal, B.Chandra Mohan, S.Srinivas Kumar, "On the use of undecimated discrete wavelet transform for medical image fusion," National Conference on Present Scenario and Future Trends in Biomedical Engineering and Healthcare Technologies, FTBH-2014, IIT BHU, Varanasi, 17-18 October 2014, pp. 5-6.	IIT BHU	2014
38.	G.Pratibha, B.Chandra Mohan, Automatic Breast cancer analysis using Bandlet optimized GA-SVM, Proceeding of the National Conference on Future Trends in Biomedical Engineering and Health Care Systems at IIT BHU Varanasi on 17-18 th October, 2014	IIT BHU	2014
39.	P.V.L.Suvarchala, S.S.Kumar, B.Chandra Mohan, "Iris Recognition under Non-Ideal Imaging Conditions and CCD Noise" Pattern Recognition and Machine Intelligence, PREMI 2013, Indian Statistical Institute, Kolkata, December 10-14,	ISI Kolkata	2013

	2013		
40.	P.Suvarchala, S.Srinivas Kumar, B.Chandra Mohan, "Effective Iris Recognition with S-Transform" International Conference on Biomedical Signals, Systems and Images , BSSI 2012 conducted by IIT Chennai, 2012.	IIT Chennai	2012
41.	P.Suvarchala, S.Srinivas Kumar, B.Chandra Mohan, "Effective Iris Recognition with S-Transform" International Conference on Biomedical Signals, Systems and Images , BSSI 2012 conducted by IIT Chennai, 2012.	IIT Chennai	2012
42.	S.Pallavi Ram, B.Chandra Mohan, "On the performance of Linear and Decision Feedback Equalizers in IIR and reverberation environments" Centenary Conference 2011, Electrical Engineering, Indian Institute of Science, (IISc)15-17 December 2011.	IISc Bangalore	2011

Awards/recognitions/achievements

S.No.	Name of the Award	Awarding body/Society/Organization	Year
1.	Best paper award for the paper titled " A Comparative Performance Evaluation of SVD and Schur Decompositions for Image Watermarking	was selected as best paper in the International Conference on VLSI, Communication and Instrumentation (ICVCI 2011)	2011
2.	Best paper for the title on Multiple Watermarking scheme using PSK with Amplitude boosting and low frequency block selection	NCSSS-2006 during Feb 24-25 , 2006 , Satyamangalm, Tamilnadu.	2006
3.	Best 3 rd paper for Dual frequency vertex fed pentagonal slot on rectangular patch for WLAN/WiMax	2016, IEEE International Conference, INDICON, IISc Bangalore	2016

	Application		
4.	Best paper award for the paper "A compact hexaband and UWB antenna using heptagon and nanogon rings with vertex feed"	INCAP 2018 conference conducted at Hyderabad., December 16-19, 2018.	2018

Details of project proposals submitted/sanctioned/completed

S.No.	Title of the Project	Funding body	Submitted/ Sanctioned/ Completed	Amount	Year/ duration
1	MODROBS Advanced Communication Laboratory with Fiber Optic Modules	AICTE	COMPLETED	7.12 lakhs	2012-13

Consultancy contribution

S.No.	Year	Amount	Details
1			

Student Project/research guidance

S.No	Level	Total number	
1	UG	Completed: 22	Ongoing: 1
2	PG	Completed: 6	Ongoing: 0
3	PhD	Completed: 8	Ongoing: 2

Administrative experience

S.No.	Role	Duration (From – to)
1	<u>HEAD OF THE DEPT, ECE</u>	2005-2019

Research credentials

Index/database	ID/Link
Google Scholar	https://scholar.google.com/citations?user=5CBk6EUAAAAJ&hl=en
SCOPUS	https://www.scopus.com/authid/detail.uri?authorId=55647165896

Web of Science	
Vidwan ID	
<p>1. Coordinator for the Lab Migration project of Digital Image Processing using Scilab by Indian Institute of Technology, Bombay (IIT Mumbai)</p> <p style="text-align: center;">B.Chandra Mohan</p> <p style="text-align: right;">20/09/2023</p>	