# Department of ECE newsletter for the year 2022

#### **Faculty achievements:**

- "An IoT Application for Detection and Monitoring of Manhole", authored by "Sai Pavan Tangella, Krishna Pavan Inala, Phani Gourinath Lella, Syed Arshad", presented in session "Cloud Computing and Internet of Things" through virtual mode in 2nd International Conference on Machine Learning and Big Data Analytics (ICMLBDA) 2022 organized by Indian Institute of Technology, Patna. (Corresponding Author: Dr.I.Krishna Pavan). It is accepted for publication.
- "Role of Communication Networks on Vehicle to Grid (V2G) System in a Smart Grid Environment" authored by Krishna Pavan Inala, Kannan Thirugnanam has been accepted for 4th International Conference on Energy, Power and Environment (ICEPE-2022) that is being organized by National Institute of Technology Meghalaya, India.
- "A Short Review on recent models and requirements of 5G application", authored by "Idrish Shaik, S Krishna Veni presented in session in IC3P 2022 organized by IEEE vizag bay section and Raghu Engineering College, Vizag.
- "Triple band antenna for IOT and 5g applications using meta surfaces and polygon slot", authored by "PS Kumar and G.Mahesh presented in session in INCAP21-22 organized by IEEE Rajastan division.
- "A deep learning approach for waste object classification using transfer learning and met heuristic algorithm", authored by "Dr B.Chandra Mohan presented in session in ICESE- 2022 organized by IIT Bombay. January 20-22, 2022.
- "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.
- Chandrasekhar Rao Jetti, Rehamatulla Shaik, Sadik Shaik, Sowmya S, "Disease Prediction using NAÏVE Bayes-Machine Learning Algorithm", International journal of Science and Healthcare Research(IJSHR), Vol 6, Issue 4, Pp 17-22, December 2021.
- Melingi Suneel Babu, Ashok Kumar, Karunakar Reddy, Ch.VMSN.Pavan Kumar, "
   A Bio-inspired Alex-Net-DrpXLm archetype for an effective brain stroke lesion detection and classification", Journal of concurrency and computation- Wiley

- Publication, April- 2022.(accepted).
- Dr B.Chandra Mohan, Dr K.Ramanjaneyulu, "Virus texture classification of TEM images using fusion of chebyshev moments and resnet50 features", Brazilian achieves of biology and technology, April 2022 (accepted).
- Mr.Ch.VMSN.Pavan Kumar,from the department of ECE published a paper titled "ABio-inspired Alex-Net-DrpXLm archetype for an effective brain stroke lesion detectionand classification", in Journal of concurrency and computation- Wiley Publication, April-2022.
- Dr Chandra Mohan, from the department of ECE published a paper titled "Virus texture classification of TEM images using fusion of chebyshev moments and resnet50 features", in Brazilian achieves of biology and technology, April 2022.
- Dr K.Ramanjaneyulu, from the department of ECE published a paper titled "Virus texture classification of TEM images using fusion of chebyshev moments and resnet50 features", in Brazilian achieves of biology and technology, April 2022.
- Dr.M.Vinod Kumar from the department of ECE Delivered a guest lecture on "Introduction to ANN' IN a 5 day Faculty development on "Research and Industry Oriented Pipelines of Constructing ML Applications" from 20/09/20222 to 24/09/2022 organized by Signal Processing Research Group (SPRG), department of ECE,KLEF IN association with IETE-Vijayawada chapter.
- Dr.P.Surendra Kumar from the department of ECE received Best Teacher award on 15/09/2022 on the view of Engineers day.
- Dr.Ch.V.M.S.N.Pavan Kumar from the department of ECE was invited to be an editor for the book titled "Futuristic Trends in Network and Communication Technologies", Published by Iterative International Publishers in August, 2022.
- Mr.PPM Prasad andDr. P. Surendra Kumar from the department of ECE published a
  paper titled "Design and Implementation of IOT based Innovative Charging Method
  For E-vehicles" in Mathematical Statistician and Engineering Applications,
  International Journal Vol. 71 No. 4, August, 2022
- Mr.VijayaBhaskarAdusumilli from the department of ECE published a paper titled "Traffic Characterization based Stochastic Modelling of Network-on-chip," in IEEE Transactions on Computers, Early Access, 18 July 2022.
- Dr.Ch.V.M.S.N.Pavan Kumar from the Department of ECE,acted as Program Committee Member and Reviewer for International Conference on Communication and Intelligent Systems (ICCIS 2022), NIT Delhi, 19<sup>th</sup>- 20<sup>th</sup> December 2022.

- Dr.Ch.V.M.S.N.Pavan Kumar from the Department of ECE, published a paper titled
   " Dual Band Hybrid DRA Antenna Design for WLAN Application" in the book series titled " Futuristic Trends in Network and Communication Technologies",
   (ISBN: 978-81- 959356-1-1), IIP Proceedings, Volume 2, Book 19, Part 3,
   Chapter 1, 1<sup>st</sup> November, 2022
- Dr.Ch.V.M.S.N.Pavan Kumar from the Department of ECE, has edited the book series titled "Futuristic Trends in Network and Communication Technologies", (ISBN: 978-81- 959356-1-1), IIP Proceedings, Volume 2, Book 19, Part 3, Nov, 2022.
- Dr.N.Kanagasaba i, from the Department of ECE, presented a paper titled "An IOT Enabled System for Breast Cancer Detection using Image Processing" in International Conference on Innovative Technologies and their Applications in Higher Education (INTAHE-2022), Annamalai University, 17th -19<sup>th</sup> October 2022.
- Mr.P.P.M.Prasad, from the Department of ECE, presented a paper titled "An IOT Enabled System for Breast Cancer Detection using Image Processing" in International Conference on Innovative Technologies and their Applications in Higher Education (INTAHE-2022), Annamalai University, 17th -19<sup>th</sup> October 2022.
- Dr.P.Surendra Kumar from the Department of ECE, presented a paper titled "An IOT Enabled System for Breast Cancer Detection using Image Processing " in International Conference on Innovative Technologies and their Applications in Higher Education (INTAHE-2022), Annamalai University, 17<sup>th</sup> -19<sup>th</sup> October 2022.
- Mr.M.V.N.Chakravarthi from the Department of EIE was conferred PhD on 27-01-2023 from Acharya Nagarjuna University.

#### **Patents:**

- > Title of the invention: Cloud based train accident prevention safety system PATENT APPLICATION PUBLICATION details
  - Application No.202241004928 A
  - Date of filing of Application :29/01/2022 Publication Date : 04/02/2022
  - Name of the applicant:- Suneel Miriyala
  - Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Bapatla Engineering College, Bapatla 522101, Andhra Pradesh, India

- ➤ Title of the invention: Cognition avoidance and control in 5g wireless sensor network for chain topology
  - Application No.202141050175 Publication Date: 1/11/2021
  - Name of the applicant:- SK.M.Subani
  - Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Bapatla Engineering College, Bapatla 522101, Andhra Pradesh, India

### Awards:

- > Title of the award: Bharat Excellence Award
  - Name of the awardees: Dr Ch.V M S N. Pavan Kumar, Asst.Prof., ECE Dept. Issued by: Friendship Forum, New Delhi.

### Workshops/FDP/STTP/Conferences attended by the Faculty

S NO	Name of the Event	Title	Faculty Name	Organizers
1	FDP	Awareness of Electronic Tools for System Design	Dr. J.Chandrasekhar Rao	Sri Sairam Institute of Technology, Chennai
2	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Dr. M.Vinod Kumar	Bapatla Engineering College,Bapatla
3	FDP	Outcome based curriculum design	Dr. M.Vinod Kumar	NITTTR, Chandigarh
4	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Dr. Naga Raju Challa	Bapatla Engineering College,Bapatla
5	FDP	Advances in Wireless and Antenna Technology	Dr. Naga Raju Challa	KLE Tech University, Belgavi

6	FDP	Recent Advancements in Power Electronics and Drives for the Integration of Future Energy Sources	Dr. Naga Raju Challa	Lendi Institute of Engineering and Technology
7	FDP	Recent Trends in Wireless Communications	Dr. Naga Raju Challa	MGIT, Hyderabad
8	FDP	NanoSensors and Devices	Dr. Naga Raju Challa	NITTTR, Chandigarh
9	FDP	Advances in Wireless and Antenna Technology	Dr. Naga Raju Challa	KLE Technological University, Belgaum Campus
10	FDP	Recent Trends in Wireless Communications	Dr. Naga Raju Challa	MGIT, Hyderabad
11	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Dr. U.Srinivasa Rao	Bapatla Engineering College,Bapatla
12	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Dr.Ch.V.M.S.N.Pavan Kumar	Bapatla Engineering College,Bapatla
13	FDP	Recent Trends in VLSI and Nano Electronics	Dr.Ch.V.M.S.N.Pavan Kumar	Sree Vidyanikethan Engineering College, Tirupathi
14	FDP	Virtual Laboratory Platform for Digital Electronic Circuits Laboratory communication Technologies	Dr.Ch.V.M.S.N.Pavan Kumar	VIT, Chennai
15	FDP	Advances in Wireless and Antenna Technology	Dr.Ch.V.M.S.N.Pavan Kumar	KLE Technological University, Belgaum Campus

16	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Dr.J.Chandrasek har Rao	Bapatla Engineering College,Bapatla
17	FDP	Emerging Trends in VLSI Design & Practical Approach	Dr.K.Rajesh	Aditya college of engineering, Madaapalle
18	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Dr.K.Rajesh	Bapatla Engineering College,Bapatla
19	FDP	Active Distribution Networks- Challenges And Solutions	Dr.K.Rajesh	BIT Sindri, Dhanbad
20	FDP	Hands on Deep- Learning Architectures For Data Classification	Dr.K.Rajesh	DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY GANGURU,
21	FDP	NanoSensors and Devices	Dr.K.Rajesh	NITTTR, Chandigarh
22	FDP	Recent Trends in VLSI and Nano Electronics	Dr.K.Rajesh	Sree Vidyanikethan Engineering College, Tirupathi
23	FDP	Advances in Wireless and Antenna Technology	Dr.K.Rajesh	KLE Technological University, Belgaum Campus
24	FDP	Recent Advancements in Power Electronics and Drives for the Integration of Future Energy Sources	Dr.K.Rajesh	Lendi Institute of Engineering and Technology
25	FDP	Recent Trends in Wireless Communications	Dr.K.Rajesh	MGIT, Hyderabad

26	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Dr.N.Nagendra Reddy	Bapatla Engineering College,Bapatla
27	FDP	NanoSensors and Devices	Dr.N.Nagendra Reddy	NITTTR, Chandigarh
28	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Dr.P.Surendra kumar	Bapatla Engineering College,Bapatla
29	FDP	Outcome based curriculum design	Dr.P.Surendra kumar	NITTTR, Chandigarh
30	FDP	Outcome Based Education and Examination Reforms	Dr.P.Surendraku mar	IQAC BEC-Bapatla
31	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Dr.Panguluri Vinodh Babu	Bapatla Engineering College,Bapatla
32	FDP	Hands- on Deep learning architectures for Data classification using Python	Dr.Panguluri Vinodh Babu	DIET &AIQUANTAM
33	FDP	Outcome based curriculum design	Dr.Panguluri Vinodh Babu	NITTTR, Chandigarh
34	FDP	NanoSensors and Devices	Dr.Panguluri Vinodh Babu	NITTTR, Chandigarh
35	FDP	Smart Materials and Nanotechnology	Dr.Panguluri Vinodh Babu	NITTTR, Chandigarh
36	FDP	Smart Materials and Nanotechnology	Dr.Panguluri Vinodh Babu	NITTTR, Chandigarh, ECE Department

37	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Mr.B.Surendra Babu	Bapatla Engineering College,Bapatla
38	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Mr.G.Mahesh	Bapatla Engineering College,Bapatla
39	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies NanoSensors	Mr.K Sambasiva Rao	Bapatla Engineering College,Bapatla
40	FDP	and Devices	Mr.K Sambasiva Rao	NITTTR, Chandigarh
41	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Mr.Mahaboob Subani Shaik	Bapatla Engineering College,Bapatla
42	FDP	NanoSensors and Devices	Mr.Mahaboob Subani Shaik	NITTTR, Chandigarh
43	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Mr.N.Naga Swathi	Bapatla Engineering College,Bapatla
44	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Mr.P.P.M.Prasad	Bapatla Engineering College,Bapatla
45	FDP	Outcome based curriculum design	Mr.P.P.M.Prasad	NITTTR, Chandigarh
46	FDP	NanoSensors	Mr.P.P.M.Prasad	NITTTR, Chandigarh

		and Devices		
47	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Mr.SK.Idrish	Bapatla Engineering College,Bapatla
48	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication Technologies	Mrs.D.Swetha	Bapatla Engineering College,Bapatla
49	FDP	Outcome based curriculum design	Mrs.N.Naga Swathi	NITTTR, Chandigarh
50	FDP	NanoSensors and Devices	Mrs.N.Naga Swathi	NITTTR, Chandigarh
51	FDP	Amazon Web Services	Mrs.N.Naga Swathi	VIT,Chennai
52	FDP	Applications of Deep Learning techniques to 5G and Beyond 5G wireless communication	Mrs.Y.Sruthi	Bapatla Engineering College,Bapatla
53	FDP	Outcome based curriculum design	Mrs.Y.Sruthi	NITTTR, Chandigarh
54	FDP	NanoSensors and Devices	Mrs.Y.Sruthi	NITTTR, Chandigarh
55	FDP	Outcome based curriculum design	Ms.K.Kalpana	NITTTR, Chandigarh
56	FDP	NanoSensors and Devices	Ms.K.Kalpana	NITTTR, Chandigarh
57	Innovation Ambassador	Advanced Level	Dr.K.Rajesh	MoE Innovation cell & AICTE
58	International Conference ICAESCT- 2022	"Dual Hop Hybrid FSO/RF System for Backhaul of Small Cells in 5G"	Dr. J.Chandrasekhar Rao	Anil Neerukonda Institute of Technology and Sciences, Visakhapatnam

59	International Conference ICAESCT- 2022	"Dual Hop Hybrid FSO/RF System for Backhaul of Small Cells in 5G"	Dr. M.Vinod Kumar	Anil Neerukonda Institute of Technology and Sciences, Visakhapatnam
60	International Conference ICAESCT- 2022	"Dual Hop Hybrid FSO/RF System for Backhaul of Small Cells in 5G"	Dr.U. Srinivasa Rao	Anil Neerukonda Institute of Technology and Sciences, Visakhapatnam
61	International Conference ICFME- 2022	Infrared Solar Module Defect Classification using Convolutional Neural Networks and SMOTE Ensembles	Dr.B.Chandra Mohan	Department of Metallurgy Engineering & Materials Science,IIT Indore
62	International Conference ICFME- 2022	Infrared Solar Module Defect Classification using Convolutional Neural Networks and SMOTE Ensembles	Dr.B.Chandra Mohan	Department of Metallurgy Engineering & Materials Science,IIT Indore
63	International Conference INTAHE- 2022	Innovative Technologies and their Applications in Higher Education	Dr.P.Surendra kumar	Annamalai University
64	International Conference INTAHE- 2022	Innovative Technologies and their Applications in Higher Education	P.P.M.prasad	Annamalai University
65	International Conference RAWCET 2022	A Dual-Band U-Shaped Microstrip Antenna for 5G MMWave Applications	Dr. J.Chandrasekhar Rao	KL University, Vijayawada

66	International Conference RAWCET 2022	A Dual-Band U-Shaped Microstrip Antenna for 5G mmWave Applications	Dr. M.Vinod Kumar	KL University, Vijayawada
67	International Conference RAWCET 2022	A Dual-Band U-Shaped Microstrip Antenna for 5G mmWave	Dr.U.Srinivasa Rao	KL University, Vijayawada
68	IP Awareness/ Training Program	National Intellectual Property Awareness Mission	P.P.M.Prasad	Intellectual Property Office,India
69	Online Certification	30 Days Master Class on Advanced Python Programming	Dr.Ch.V.M.S.N.Pavan Kumar	APSSDC in Association with Pantech eLearning PVT LTD, Chennai
70	Online Certification	Data Structures and Algorithms:In- Depth using Python	Dr.Ch.V.M.S.N.Pavan Kumar	Udemy
71	Online Certification	Microwave Engineering	Dr.U.Srinivasa Rao	NPTEL SWAYAM
72	Online Certification	Microwave Engineering	K.Kalpana	NPTEL SWAYAM
73	Online Course	EMFT	Dr. J.Chandrasekhar Rao	Udemy
74	Online course	5G for Everyone	N.Naga Swathi	Coursera, Qualcomm Wireless Academy
75	Online Workshop	Outcome Based Education and Examination Reforms	Dr.Ch.V.M.S.N.Pavan Kumar	Bapatla Engineering College,Bapatla
76	Online Workshop	5G NOMA Communications	Dr.Ch.V.M.S.N.Pavan Kumar	CVR College of Engineering,
77	SEMINAR	Quality Management in Technical Institution	Dr. M.Vinod Kumar	Vidya Jyothi Institute of Technology, HYD
78	STTP	6G Wireless Communication	Dr. M.Vinod Kumar	IIT, Dharwad
79	STTP	6G Wireless Communication	Dr. Naga Raju Challa	IIT, Dharwad
80	STTP	6G Wireless	Dr. Naga Raju Challa	IIT, Dharwad

		Communication		
81	STTP	6G Wireless Communication	Dr.K.Rajesh	IIT, Dharwad
82	Symposium NSMA- 2022	Orthogonal Moments for Malware Classification	Dr.B.Chandra Mohan	Dept of Maths,IIT Chennai
83	Symposium NSMA- 2022	Orthogonal Moments for Malware Classification	Dr.B.Chandra Mohan	Dept of Maths,IIT Chennai
84	Webinar	Celebrating 75 years of Self- sufficient India in Research & Innovation- Azadi Ka Amrit Mahostav	Dr.Panguluri Vinodh Babu	IFERP
85	Workshop	Research Methodologies and Scientific Publishing	Dr. M.Vinod Kumar	Bapatla Engineering College
86	Workshop	Geophysical Data Processing based on Signal Processing and Deep Learning	Dr. M.Vinod Kumar	SRM University, AP
87	Workshop	Research Methodologies Scientific Publishing	Dr. Naga Raju Challa	Bapatla Engineering College

# **Events organized**



Interaction session—Seniors & Juniors of ECE



Launching of Departmental magazine

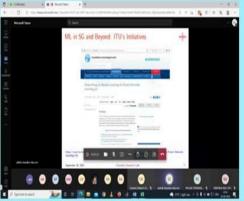




**Alumni Interaction** 

**Farewell Celebrations** 





Dr. NagarajuChalla, Dr.Ch.V.M.S.N.Pavan Kumar organized a three day online Faculty Development Programme on " Applications of Deep Learning Techniques to 5G and Beyond 5G Wireless Communication Technologies" during 19/09/2022 to 21/09/2022.





Dr.N.Venkateswara Rao, Prof., & HOD, Dr.M.Suneel, Asst.Prof., Department of ECE, Bapatla Engineering College, Bapatla organized a "Parents Meet" for third year students on 17/11/2022.