



B.M.S COLLEGE OF ENGG, B'LORE-19

[Autonomous Institute under VTU, Affiliated to VTU]

DEPT. OF ELECTRONICS &
COMMUNICATION ENGINEERING

JULY 2023 – JUNE 2024

Activity Report

TEXTSTUDIO

JULY-2023

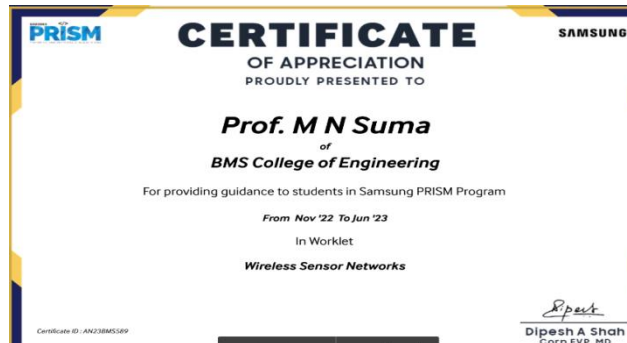
July 10, 2023: ELSOC (Electronics society), Department of Electronics & Communication Engineering in association with Department of Mathematics conducted a value added course 'Electronics-Py' for the students of the ECE department held from 10th-14th of July 2023.



July 14, 2023: Dr. K P Lakshmi, Professor, Department of Electronics and Communication Engineering chaired a session at the IEEE-CONECCT-2023 at the 9th International Conference on Electronics, Computing and Communication Technologies a flagship conference of IEEE Bangalore section held from 14th – 16th of July 2023 at Ramaiah Institute of Technology, Bangalore.



July 18, 2023: Dr. Suma M N, Professor, Department of Electronics and Communication Engineering received 'Certificate of Appreciation' from Samsung PRISM for providing guidance to the students in Samsung PRISM program in worklet 'Wireless Sensor Networks' from November 2022-June 2023.



AUGUST-20223

August 04, 2023: Dr. Sadhana Kumari, Assistant Professor, Department of Electronics and Communication Engineering served as a TPC member at 4th EAI International Conference on Cognitive Computing and Cyber Physical Systems 2023 hosted by Vishnu Institute of Technology, Bhimavaram, India.



4th EAI International Conference on Cognitive Computing and Cyber Physical Systems 2023 (EAI IC⁴S 2023)

This is to certify that **Sadhana Kumari** of **BMS College of Engineering, Bengaluru** served as a **TPC Member** at

EAI IC⁴S 2023 during 04-06 Aug.,2023

Hosted by

Vishnu Institute of Technology, Bhimavaram, India in Hybrid Mode

Dr. Nishu Gupta
Organizing Chair
IC⁴S 2023

Dr. D. Suryanarayana
Director and Principal
Vishnu Institute of Technology

August 04, 2023: Dr. Sadhana Kumari, Assistant Professor, Department of Electronics and Communication Engineering presented below mentioned papers at the 4th EAI International Conference on Cognitive Computing and Cyber Physical Systems 2023 hosted by Vishnu Institute of Technology, Bhimavaram, India.

- Design and Parametric Study of Monopole Blade Antenna for UHF Band Aerospace Applications.



4th International Conference on Cognitive Computing and Cyber Physical Systems 2023 (IC⁴S 2023)

This is to certify that paper titled "**Design and Parametric Study of Monopole Blade Antenna for UHF Band Aerospace Applications**" authored/ Co-authored by **Sadhana Kumari** of **BMS College of Engineering, Bangalore, 560019**

was presented at

IC⁴S 2023 during 04-06 Aug.2023, Hosted by

Vishnu Institute of Technology, Bhimavaram, India in Hybrid Mode

Dr. Nishu Gupta
Organizing Chair
IC⁴S 2023

Dr. D. Suryanarayana
Director and Principal
Vishnu Institute of Technology

- Tunable UWB Metasurface Absorber for Smart City Compatible IoT Applications.



**4th International Conference on Cognitive Computing and Cyber
Physical Systems 2023 (IC⁴S 2023)**

This is to certify that paper titled “Tunable UWB Metasurface Absorber for Smart
City Compatible IoT Applications” authored/ Co-authored by Sadhana Kumari of
BMS College of Engineering, Bangalore, 560019

was presented at

IC⁴S 2023 during 04-06 Aug.2023, Hosted by

Vishnu Institute of Technology, Bhimavaram, India in Hybrid Mode

Nishu Gupta

Dr. Nishu Gupta
Organizing Chair
IC⁴S 2023

Suryanarayana

Dr. D. Suryanarayana
Director and Principal
Vishnu Institute of Technology

August 10, 2023: ELSOC, Department of Electronics and Communication Engineering in collaboration with The VLSI System Design (VSD) and India Electronics Semiconductor Association (IESA) organized a state level RISC-V and VLSI roadshow, hosted by ELSOC and BMSCE IEEE SSCS. The event had 100 participants from across Karnataka, aimed to provide practical insights into RISC-V architecture and VLSI design.



August 19, 2023: Department of Electronics and Communication Engineering organized industry visit to Nokia Networks Pvt Ltd., for the students of the department. Dr. K R Sudhindra, Associate Professor from the department was the faculty coordinator.



August 19, 2023: Department of Electronics and Communication Engineering conducted ELSOC week from 19th – 25th August 2023 which comprised of various events scheduled below:

- Electro Odyssey (fun with electronics)
- 0 to Pi (Raspberry Pi workshop)
- MSP and BioInformatics (Medical Imaging workshop) in association with IEEE SPS
- TransmitTech-In association with IEEE APS
- Synthosphere-Hackathon-In association with IEEE SSCS



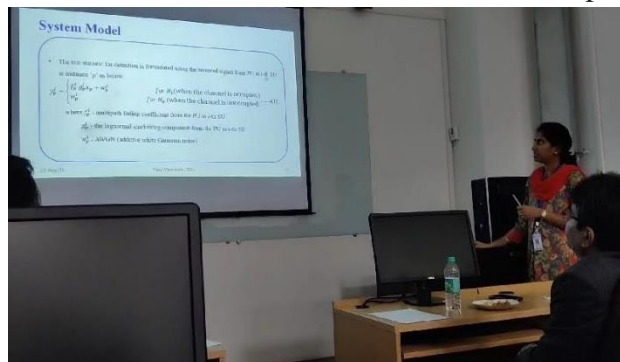
August 19, 2023: ELSoC, Department of Electronics and Communication Engineering in collaboration with BMSCE IEEE APS SBC organized a 5-days workshop on ‘Antenna Alchemy’ for the students of BMSCE from 14th- 19th of August 2023. The workshop provided platform for understanding of antenna design and simulation using ANSYS HFSS (High Frequency Structure Simulator) tool. The inauguration and valedictory function was graced by Dr. Siddappaji, HOD and Dr. Archana H R, Faculty coordinator from Dept., of ECE.



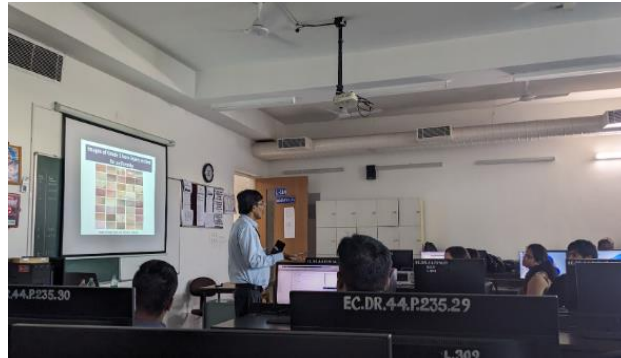
August 19, 2023: Department of Electronics and Communication Engineering inaugurated ‘IEEE Signal Processing Society’, Student Chapter, BMSCE. Mr. Shailesh Sakri, Director, Automotive Audio Software, Harman International and the Chairman, IEEE Signal Processing Society, Bangalore Chapter was the chief guest and delivered a talk on ‘DSP as a Career’ to the students.



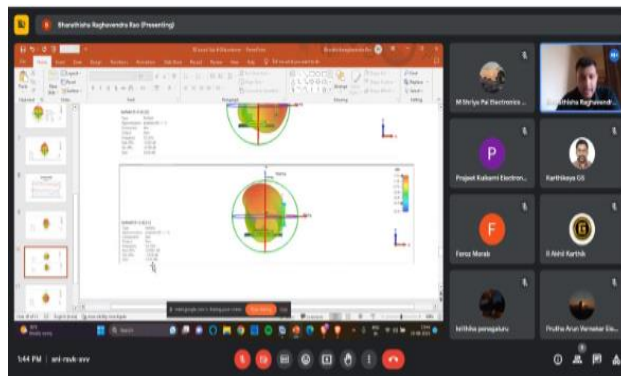
August 21, 2023: Smt. Shachi P, Assistant Professor and Research Scholar, Department of Electronics and Communication Engineering, completed the Ph.D. final viva-voce on the topic ‘Performance Analysis of Cooperative Communication based Cognitive Radio Networks’ under the guidance of Dr. Suma M N, Professor and Dr. K R Sudhindra, Associate Professor, Department of ECE.



August 24, 2023: Department of Electronics and Communication Engineering in association with IEEE Signal Processing Society, Student Chapter, BMSCE and ELSOC, ECE BMSCE organised a workshop on Medical Signal Processing and Bioinformatics. The invited resource person was Dr. D K Ravish, Associate Professor, Ambedkar Institute of Technology, Bangalore.



August 25, 2023: ELSOC, Department of Electronics and Communication Engineering in collaboration with BMSCE IEEE APS SBC organized ‘TransmitTech’ an antenna designing competition as a part of ELSoc week through online mode. The first and second prize winners were awarded with Rs.1000 and Rs.750. Dr. Karthikeya G S and Dr. Feroz Morab, Assistant Professors from the department were judges of the competition.



August 30, 2023: Dr Poornima G, Associate Professor, Department of Electronics and Communication Engineering presented a paper titled ‘Empowering Students through the Flipped Classroom: A Catalyst for Learning’ at the 2nd International Conference on Exploring Colossal Technological Advances of the 21st Century in Social Science, Education, Engineering and Technology (ICECTASET-2023)organised by Iloilo State University of Fisheries Science and Technology, Philippines and Institute For Engineering Research and Publication (IFERP) - Philippines Society.

September-2023

September 01, 2023: Dr. Rajanikanth K N Associate Professor, Department of Electronics and Communication Engineering, Mr. Sanketh J, Mr. Sree Suryadatta M Vadhooras, Mr. Vinay Kumar K V and Mr. Vinayak Rao H K students from the department presented a paper titled **‘Visual Kinetic SLAM Hardware Acceleration for Navigation’** at IEEE 2023 International Conference on Network, Multimedia and Information Technology (NMITCON) held at Nitte Meenakshi Institute of Technology Bangalore, India.

September 01, 2023: Dr. Suma M N, Professor and Dr. Rajanikanth K N Associate Professor, Department of Electronics and Communication Engineering published a research paper titled **‘Mitigating the Spread of COVID-19 Using Internet of Things: A Holistic Approach’** in the book Contemporary Applications of Data Fusion for Advanced Healthcare Informatics published by IGI Global.

DOI: 10.4018/978-1-6684-8913-0.ch009

September 02, 2023: Department of Electronics and Communication Engineering in association with BMSCE IEEE Signal Processing society Student Branch organized a lecture series on **‘Intuitive Control of Bionic Limbs’** for the students, faculty members and distinguished dignitaries from various institutions from Bangalore. The invited guest speaker was Dr. V John Matthews, Professor, School of Electrical Engineering and Computer Science at the Oregon State University.



September 27, 2023: Department of Electronics and Communication Engineering organised lab and department visit to the students of first year. A brief introduction about the department and lab facilities were given by the faculties.



September 30, 2023: Dr. Veena M B, Associate Professor, Department of Electronics and Communication Engineering and Mrs. Dhanyavathi A, Ph.D. student published a journal paper titled ‘**Osteoporosis Detection and Classification of Femur X -ray Images Through Spectral Domain Analysis using Texture Features**’ in International Journal of Advanced computer science and applications, Vol.14, No.9, Sep 30, 2023 pp766-773.(Scopus/WOS indexed)

September 30, 2023: Dr. Veena M B, Associate Professor, Department of Electronics and Communication Engineering and Mrs. Meena Deshpande Ph.D. student published a journal paper titled ‘**Performance Analysis of Object Detection Algorithms Based on Transform and Statistical Texture Classification Methods**’ in Journal of the Balkan Tribological Association, Vol. 29, No3, 322-331, Sep 2023 (Scopus indexed)

September 30, 2023: Department of Electronics and Communication Engineering organised felicitation ceremony for Mr. Yagnesh on his retirement and to honour for his remarkable service in the department.



October-2023

October 01, 2023: Dr. Meera A, Professor and Aishwarya S K student, Department of Electronics and Communication Engineering published a research paper titled **‘Design of Low Power Flash ADC using Memeristor Based Encoder and Three Stage Comparator’** at the Journal of Emerging Technologies and Innovative Research(JETIR).

2023 JETIR October 2023, Volume 10, Issue 10

<https://www.jetir.org/papers/JETIR2310454.pdf>

October 18, 2023: Dr. R Jayagowri, Associate Professor, Department of Electronics and Communication Engineering and Roohum Jegan Ph. D student from the department published a research paper titled **‘Voice Pathology Detection using Optimized Convolutional Nueral Network and Explainable Artificial Intelligence-Based Analysis’** in the Computer Methods in Biomechanics and Biomedical Engineering WOS indexed Q4 Journal.

<https://doi.org/10.1080/10255842.2023.2270102>

October 20, 2023: Dr. Shachi P, Assistant Professor, Mr. Rohit Hugar, Ujjwal Rakesh, students, Department of Electronics and Communication Engineering, presented a paper titled **‘Particle-swarm Optimization-based Digital FIR Filter Design’** at the International Conference on Evolutionary Algorithms and Soft Computing Techniques, EASCT-2023, organized by RV Institute of Technology and Management, Bengaluru.



October 20, 2023: The following research paper was presented at the 2nd International Conference on Computing, Communication, and Cyber Physical Systems (IC3CPS 2023) organised by Reva University held on 20th and 21st October 2023.

- Dr. Poornima G, Associate Professor and Mr. Maruthi H C, Ph. D student Dept., of ECE on **‘An Optimal Approach to find optimal locations for base station to achieve energy efficiency in WSN's’**
- Dr. Poornima G, Associate Professor and Mr. Naganna, Ph. D student Dept., of ECE on **‘An Efficient Machine Learning and Filter Based Implementation of Data Fusion in WSN’**.

October 27, 2023: Dr. Suma M N, Professor, Department of Electronics and Communication Engineering, attended **'India Mobile Congress 2023'** organised by the Department of Telecommunications (DoT) and the Cellular Operators Association of India held at Pragati Maidan, New Delhi.



October 30, 2023: Mr. Pavan S Murthy and Ms. Kshama Marathe 7th semester students, Department of Electronics and Communication Engineering won 1st prize in the 'Pitch-A-Thon' an IEEE sponsored event on the topic **'Antenna Mavericks'** under the guidance of Dr. Karthikeya G S, Assistant Professor, Dept., of ECE.

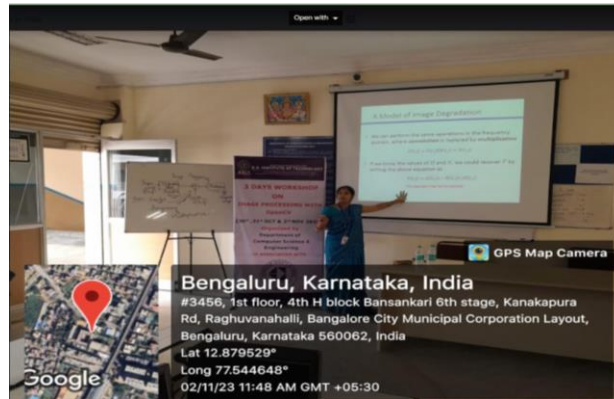


October 31, 2023: As an integral part of the curriculum design process for UG and PG, a stakeholders' meeting was conducted where experts from the industry and academia, alumni, parents and current students were invited. The draft of the scheme of all semesters of UG and PG along with the detailed syllabus was presented by Dr. Siddappaji, Head, Dept., of ECE to the gathering and all the inputs given by all the stakeholders were recorded to be incorporated into the updated curriculum. External experts encompassing industry and academia, faculties of the department, students and their parents attended the meeting.



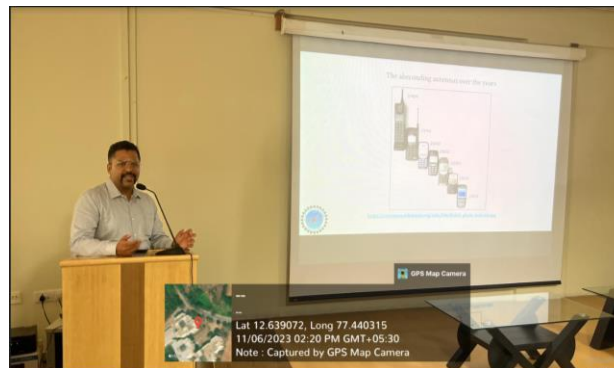
NOVEMBER 2023

November 02, 2023: Dr. Archana H R, Assistant Professor, Department of Electronics and Communication Engineering delivered a talk as resource person on ‘**Image Restoration and Image Filtering**’ in a 3-day workshop on ‘**Image Processing with OpenCV**’ organized by K.S. Institute of Technology, Bangalore.



November 04, 2023: Dr. Poornima G, Associate Professor, Department of Electronics and Communication Engineering served as ‘**Session Chair**’ for CSITSS-2023 organized by RV College of Engineering, Bengaluru in association with Florida International University, Miami, USA and technically co-sponsored by IEEE Bangalore Section held during 2nd-4th November 2023.

November 06, 2023: Dr. Karthikeya G S, Assistant Professor, Department of Electronics and Communication Engineering was invited to deliver a talk on ‘**5G Antenna Systems**’ at Jain University as a part of the ATAL FDP on ‘**Advancements in Cellular Technology**’.



November 07, 2023: Dr. Siddappaji, HoD, Department of Electronics and Communication Engineering, concluded the six-week internship program hosted by the Advanced RF and Wireless Communication Lab. The internship was titled ‘**Antenna Designs using Commercial Software: An Experiential Learning Approach**’. Nineteen students received their internship certificates.



November 07, 2023: Dr. Siddappaji, HoD, Department of Electronics and Communication Engineering, concluded the six-weeks internship program on **“FPGA Design and Multimedia Integration: Realizing JPEG Bitstream with Basys3 using Vivado”**. An Experimental Learning Approach offered by the Center of Excellence Lab in VLSI on 7th November 2023. Mr. Jeeru Dinesh Reddy and Mrs. Radha R C, Assistant Professors from Dept. of ECE, BMSCE were the resource persons for the internship program. Mr. Ravuri Aneesh Kumar, Senior Verification Lead, Intel India Pvt. Ltd was invited to handle a session on FPGA Design Flow .Total of 38 students were benefitted from this internship.



November 10, 2023: Dr. Ananatha Sunil Maligi, Assistant Professor, Department of Electronics and Communication Engineering was invited as distinguished guest at the Inauguration of the '**Thin Films and Optoelectronic Devices Laboratory**' at the Department of Electronics and Communication, BMS Institute of Technology and Management (BMSIT&M), Bangalore.



November 15, 2023: Department of Electronics and Communication Engineering inaugurated '**Seminar Hall ECE Department**'. The occasion was graced by Dr. B S Ragini Narayan, Donor Trustee & Chairpaerson, BMSET and presided by Dr. Muralidhara s, Principal, BMSCE. The Guest of Honor were Dr. P Dayanand Pai, Trustee, BMSET & Chairman, BMSCE, Sri Aviram Sharma, Trustee, BMSET, Dr. Suresh Ramaswamy Reddy, Vice-Principal (Academic), BMSCE and Dr. Bheemsha, Vice-Principal (Admin), BMSCE.



November 20, 2023: Mr. Pavan S Murthy and Ms. Kshama U Marathe, students 7th semester, Department of Electronics and Communication Engineering won **1st prize** in the Nokia ideathon contest on the topic ‘**Aperture Coupled Cost-Effective 5G Antenna Design for 26GHz Region**’ organised by Nokia Networks Pvt., Ltd under the guidance of Dr. suma M N, Professor and Karthikeya G. S, Assistant Professor, Dept., of ECE.



November 20, 2023: Ms. Keerthana Jayaprakash and Ms. Anushka P, students 7th semester, Department of Electronics and Communication Engineering won **2nd prize** under best project category titled ‘**Industrial Metaverse using Digital Twin**’ organised by Nokia Networks Pvt., Ltd under the guidance of Dr. suma M N, Professor and Dr. K R Sudhindra, Associate Professor, Dept., of ECE.



November 24, 2023: The IEEE COMSOC student chapter of Department of Electronics and Communication Engineering organized a 2-day workshop in association with ELSOC on ‘**AR-VR Oasis**’ (workshop on meta spark AR) at ECE Seminar Hall. There were around 50 participants from 1st, 2nd and 3rd year students from all departments of the college. It was a hands on training on the use of meta spark and student group of 2 or 3 were encouraged to do small projects and was judged by Mr. Pavan Grangdhim, COO at Craftech 360 an industry expert. Internships were awarded to the best team.



November 25, 2023: Dr. Shachi P. Assistant Professor, Department of Electronics and Communication Engineering was part of the organizing committee and served as TPC Co-chair for the 5th PhD Colloquium on Emerging Domain Innovation and Technology for Society (PhD EDITS), 2023, a research colloquium organized by the IEEE Communication society Bangalore Chapter.



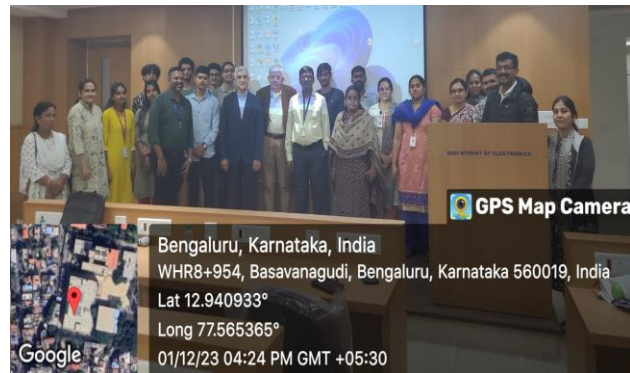
November 27, 2023: Mrs. Lalitha S, Assistant Professor, Department of Electronics and Communication Engineering published a research paper titled ‘**Delay-aware optimized scheduling algorithm for high performance wireless sensor networks**’ in the Journal for Control, Measurement, Electronics, Computing and Communications, Automatika, 65:1, 92-97, DOI: 10.1080/00051144.2023.2269642 To link to this article: <https://doi.org/10.1080/00051144.2023.2269642>

November 30, 2023: Copyrights authored by Dr R Jayagowri, Associate Professor, Department of Electronics and Communication Engineering and ROOHUM JEGAN owned by BMSCE, titled '**Improved Tempogram Based Image Textural Descriptors For Voice Disorder Detection**' bearing Diary No. **18338/2023CO/L** and copyright titled '**Enhanced Gammatone Cepstral Coefficients for Voice Pathology Detection Using Decision Tree and K-nearest Neighbours Classification**' bearing Diary No. **18337/2023-CO/L** are now granted and registered with the Copyright Office, Government of India.

DECEMBER 2023

December 01, 2023: Department of Electronics and Communication Engineering organised a talk titled ‘**Interdisciplinary Approach in Technology Development**’ and ‘**Broadband Circularly Polarized Moxon Based Antenna**’.

The invited resource persons were Prof. Shibhan K Koul, a world-renowned researcher, Professor Emeritus of IIT Delhi and Prof. Edip Niver, Professor Emeritus, Department of Electrical and Computer Engineering, New Jersey Institute of Technology, USA. The talk was coordinated by Dr. Karthikeya G S, Assistant Professor from the department.



December 02, 2023: Dr. Rajanikanth K N, Associate Professor, Department of Electronics and Communication Engineering published a research paper titled ‘**A survey and Analysis of Drone Detection Systems using a Systems Approach Superposed on Scenarios**’ in Systems Engineering (Q2), The Journal of the International Council on Systems Engineering, Wiley.

<https://doi.org/10.1002/sys.21735>

December 08, 2023: Department of Electronics and Communication Engineering in association with IEEE Communications Society Student Branch chapter conducted ‘**TECHNO – SOCIAL**’ poster making competition at the department seminar hall. The workshop in total had 60 registrations. Prize Pool of Rs 3500/- was announced and the winners were felicitated.



December 08, 2023: Dr. Veena M.B, Associate Professor and Mr. Girish N Ph.D student, Department of Electronics and Communication Engineering published a research paper titled ‘**Evaluation of WATERMARK Channel for Underwater Communication using Dual Tree Complex Wavelet Transform based Orthogonal Frequency Division Multiplexing Model**’ in the International Journal of Computer Network and Information Security Published Online on December 8, 2023 by MECS Press. Vol 15, No.6 PP 16-29, ISSN: 2074-9104, DOI: 10.5815/ijcnis.2023.06.02 (Scopus)

December 11, 2023: Dr. Karthikeya G S, Associate Professor, Department of Electronics and Communication Engineering presented a paper titled ‘**Application of Metamaterials in mm Wave 5G Antenna Designs**’ in the IEEE MAPCON 2023 held at Ahmedabad from 11th -13th December 2023.



December 11, 2023: As a part of Phase Shift Department of Electronics and Communication Engineering organized the following workshops and events for the students in the department from 11th -15th of December 2023. Dr. Latha H N, Assistant Professor from the department was the Phase Shift coordinator.

Workshops:

- **The SecureEmbed workshop:** Mr. Suresh, Senior Manager, Sienna ECAD was the invited resource person.



- **Beyond Waves Antenna Evolution:** Dr. Balamati Choudhury, a Senior Scientist at the National Aerospace Laboratories (NAL), and Mr. Daniel Amos, the Director of Rapid 3D and Dr. Maruti Tamrakar, Application Engineer at Keysight Technologies were the invited resource persons. The workshop was coordinated by Dr. Karthikeya G. S and Dr. Sadhana Kumari, Associate Professors, from the department.



- **FPGA Finesse:** Mr. Vishnudev Gowda, an Application Engineer at CoreEL Technologies was the invited resource person. The workshop commenced with a detailed introduction to the FPGA architecture, specifically centred around Basys3 and PynQ boards with hands-on session.



Events:

- **Electrostorm:** Electronics-themed treasure hunt. The event aimed to infuse fun and interactivity into the world of electronics, encouraging participants to explore and apply their knowledge in an engaging manner.



- **Fury Road:** 52 teams brought their pre-built RC cars to navigate a challenging course of obstacles, battles, and racing tracks. The competition aimed to determine the most skillful and innovative RC car builders.



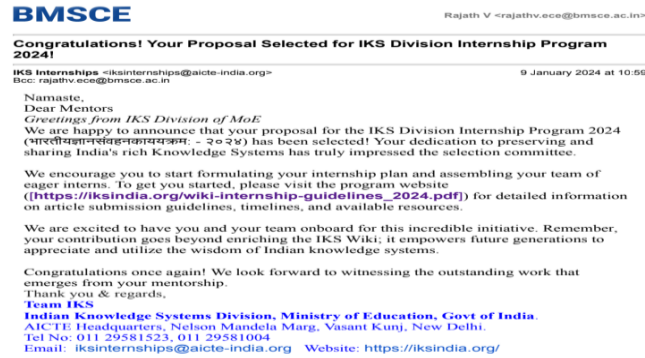
December 19, 2023: Dr. Veena M.B, Associate Professor, Mr [Rohan Deodurg](#), Mr. [V Shrinidhi](#), and Ms [S Soundarya](#) M.Tech Students, Department of Electronics and Communication Engineering presented a paper titled '**Design of Optimized CNN for Image Processing using Verilog**' in 4th IEEE Global conference for advancement in Technology on 6-8 Oct. 2023, Published in IEEE Xplore on 19th Dec 2023 DOI: [10.1109/GCAT59970.2023.10353422](https://doi.org/10.1109/GCAT59970.2023.10353422).

December 31, 2023: Dr. Laitha S, Assistant Professor, Department of Electronics and Communication Engineering Published research paper titled '**Delay-aware optimized scheduling algorithm for high performance wireless sensor networks**' in the Journal for Control, Measurement, Electronics, Computing and Communications, Automatika, 65:1, 92-97, DOI: [10.1080/00051144.2023.2269642](https://doi.org/10.1080/00051144.2023.2269642)

December 31, 2023: Dr. Suma M N, Professor and Dr. Sudhundra K R, Associate Professor, Department of Electronics and Communication Engineering along with UG student SKANDA H from the department have been Granted Indian Patent no 485153 for-'**A SYSTEM AND A METHOD FOR PROVIDING DYNAMIC BEAM-STEERING FOR AN ANTENNA**' in the name of B.M.S COLLEGE OF ENGINEERING on 02/03/2023.

JANUARY 2024

January 09, 2024: An Internship project proposal titled ‘**Astral Narratives: Exploring Celestial Chronicles in Vedic and Allied Texts**’ submitted by Dr. Rajath Vasudevamurthy (as PI), Assistant Professor, Department of Electronics and Communication Engineering, BMSCE and Mr. Sunder Chakravarty (as Co-PI), Adjunct Faculty, Centre for Ancient History and Culture, Jain University, Bengaluru, aimed at generating Wiki-type articles has received approval for funding by the Indian Knowledge Systems (IKS) Division of the Ministry of Education (MoE).



January 18, 2024: Department of Electronics and Communication Engineering in association with IEEE Communications Society Student Branch chapter conducted ‘**ElectroTitan**’ games related to electronics. The rounds consisted of memory card game, simple quiz, guessing electronic components blindfolded, and a binary bingo game. The event had 30 participants and prize pool of Rs. 500/- and Rs. 300/- was awarded to the winners. Dr. Jayanthi K Murthy, Associate Professor from the department was the faculty coordinator.



January 20, 2024: Dr. Veena M.B, Associate Professor, Department of Electronics and Communication Engineering and Ms. Smita C Chetti research scholar from the department published a research paper titled ‘**Conceptualization and Design of 8-Bit SRAM Using Quantum Dot Cellular Automata**’ in SSRG International Journal of Electrical and Electronics Engineering. Volume 11 Issue 1, Pp14-27, ISSN: 2348-8379.

<https://doi.org/10.14445/23488379/IJEEE-V11I1P103>

January 23, 2024: Department of Electronics and Communication Engineering in association with IEEE Communications Society Student Branch chapter conducted ‘**Pace Up**’ a live interactive session regarding internships, selection criteria, cross skilling- up skilling, tips and motivation. She also spoke about tips to face interviews, details about building a resume, highlighted importance of self confidence and extracurricular activities that add up to the curriculum vitae, around 60 student had registered and participated in the event. Ms Vibha Mishra, Assistant Manager, L&D was the invited resource person.



January 23, 2024: Department of Electronics and Communication Engineering organized ‘**Industry Visit**’ for the students of 5th semester ECE to ‘**ADVI Group Of Industries**’ a leading company in the fields of AI, Software, and Automation, located in Marathahalli, Bengaluru. Dr. Rajanikanth K N, Associate Professor, Dr. Archana H R, Dr. Maligi Anantha Sunil, and Dr. Surendra H.H, Assistant Professors from the department accompanied the students.



FEBRUARY 2024

February 01, 2024: Dr. R Jayagowri , Associate Professor, Department of Electronics and Communication Engineering authored 2nd edition of book titled ‘**STATIC TIMING ANALYSIS FOR VLSI CIRCUITS**’ published by MEDTECH, A division of Scientific International Pvt. Ltd, New Delhi with ISBN :978-81-965445-6-0.



February 01, 2024: Dr. Lalitha S, Dr. Madhusudan K N, Dr. H R Archana, Assistant Professors, Department of Electronics and Communication Engineering authored the book titled ‘**Image Processing Using Matlab Handbook**’ published by Hexagon 5D Technologies Publications with ISBN: 978-81-958382-4-0.



February 19, 2024: Dr. Vasundhara Patel, Professor, Department of Electronics and Communication Engineering has been granted **Patent** for invention titled ‘**Capless Low Dropout Regulator with Programmable Output Voltage**’ with Patent number 511966.



February 23, 2024: Dr. K P Lakshmi, Professor, Department of Electronics and Communication Engineering was invited as a resource person to deliver a talk on ‘**Sensors for Health Diagnosis**’ in a two-day workshop on ‘Introduction to Composite Materials and their Applications’ organized by RNS Institute of Technology, Bangalore.



MARCH 2024

March 01, 2024: Dr. Poornima G, Associate Professor, Department of Electronics and Communication Engineering published a research paper titled 'Low Power Design of Efficient Wireless sensor Node' in the International Journal for Research in Applied Science and engineering Technology(IJRASET). ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 12 Issue III Mar 2024- Available at www.ijraset.com.

March 14, 2024: Dr. R. Jayagowri, Associate Professor, Department of Electronics and Communication Engineering and Ms. Roohum Jegan, Ph. D student presented a paper titled 'Enhancing Voice Disorder Detection Using Deep Transfer Learning Feature Fusion' and won the Best Paper Award in the IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2024) held from March 14th -16th of 2024 organised by ABV-IITM Gwalior, India, in collaboration with the IEEE MP Section.

March 15, 2024: Dr. K N Madhusudan, Assistant Professor, Department of Electronics and Communication Engineering was invited as 'Session Chair' at The International Conference on Distributed Computing and Optimization Techniques (ICDCOT-2024) organized by SJB Institute of Technology, Bengaluru.



March 15, 2024: Under University Consortium colleges, UG students from the Department of Electronics and Communication Engineering participated in the '5G LABATHON' conducted by NOKIA Networks, Manyata Tech Park, Bengaluru. Dr. Suma M N, Professor and Dr. Sudhindra K R, Associate Professor from the department were the faculty coordinators.

March 19, 2024: Dr. Veena M B, Associate Professor, Department of Electronics and Communication Engineering and Mr. Gagan Bagewadi, PG student from the department published a book chapter titled 'Identification of Plant Leaf Disease Using Synthetic Data Augmentation ProGAN to Improve the Performance of Deep learning Models' in Springer Nature Singapore Pte Ltd. 2024 D. Asirvatham et al (eds.), Evolutionary Artificial Intelligence, Algorithms for Intelligent Systems. https://link.springer.com/chapter/10.1007/978-981-99-8438-1_14.

March 26, 2024: Dr. Karthikeya G. S, Assistant Professor, Department of Electronics and Communication Engineering published a research paper titled 'A Compact Dual-polarized Probe-fed UWB Antenna System for Breast Cancer Detection Applications' in Wireless Networks. <https://doi.org/10.1007/s11276-024-03726-0>

APRIL 2024

April 04, 2024: Department of Electronics and Communication Engineering organized a guest lecture on ‘**Verifying Next Gen Designs with Formal**’ for the students of 6th semester from the department. Dr. Raj S Mitra, Director Cisma - a subsidiary of VeriKwest Systems Inc, Bangalore was the invited resource person. The talk was followed by an interactive session with the students. Cisma has also offered internships to selected EC students in the verification domain. Dr. Kiran Bailey, Assistant Professor and Mrs. K Sujatha, Associate Professor from the department were the event coordinators.



April 05, 2024: Department of Electronics and Communication Engineering in association with Impulse VLSI organized a talk on ‘**Future of semiconductor design and FINFET**’ for all pre-final year ECE/EEE students of BMSCE from 5th- 6th of April 2024. Mr. Manjunath Jadhav, Business Owner, Impulse VLSI was the invited resource person and Dr. Vasundhara Patel K S, Professor, Dr. Hemavathi, Assistant Professor, Dept., of ECE and Dr. Nethravathi, Assistant professor, Dept., of EEE were the event coordinators.

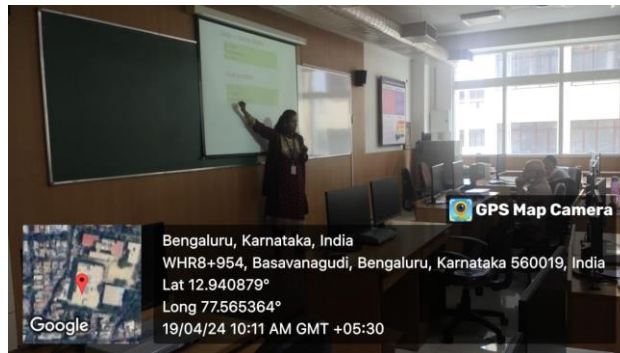


April 06, 2024: ELSOC Club members from the Department of Electronics and Communication Engineering visited Belaku Shishu Nivasa, an orphanage in Basavangudi, Bangalore, as part of a social initiative. The club members interacted with the children and donated essential items including food, stationary, and clothing. The visit was led by Dr. Siddappaji, Head of Department, and Dr. Archana H R, Faculty Coordinator, the faculty members and student volunteers from the department participated in the event.



April 19, 2024: The Department of Electronics and Communication had organized a two day technical staff training Program on ‘**Concepts of Python Programming**’ from 19th- 20th April 2024. The agenda behind the program was to upgrade the skills of the technical staff in Python Programming. The focus of this program was to familiarize the technical staff with the basics of python programming, usage of Python libraries.

Dr. Latha H N, Mrs. Pooja A P, Dr. Shachi P, and Mrs. Monika Sharma D, Assistant Professors from the department served as resource person for this two day program.



April 23, 2024: Dr. Archana H R, Assistant Professor, Department of Electronics and Communication Engineering published a research paper titled ‘**Design and Analysis of Imaging Chip Using High-Speed AXI-Interface for MPSOC Applications on FPGA**’ in the journal of Wireless Personal Communications.

DOI- <https://doi.org/10.1007/s11277-024-11077-4>.

April 23, 2024: Department of Electronics and Communication Engineering in association with Manya - The Princeton Review organized a seminar on ‘**Higher Education**’ for pre-final year ECE students. Mr. Rahul Sreekumar, Regional Head was the invited resource person and the session was coordinated by Dr. Hemavathi, Assistant Professor, Dept., of ECE.



April 28, 2024: Dr. Veena M B, Professor, and Mrs. Monika Sharma D, Assistant Professor, Department of Electronics and Communication Engineering published a book chapter titled ‘**Design and Implementation of Five Port Label Switched NoC Router Using FPGA**’ in ICT: Applications and Social Interfaces, Lecture Notes in Networks and Systems (LNNS, Volume 908), Springer Nature Singapore Pte Ltd. 2024.

DOI: https://doi.org/10.1007/978-981-97-0210-7_5.

April 29, 2024: Department of Electronics and Communication Engineering in association with IMS Learning Resources Pvt Ltd., organized a seminar on ‘**The Ultimate Guide to MBA after Graduation**’ for pre-final year ECE students. Around 36 students attended the session. Dr. William Rajan, Training Manager was the invited resource person and the session was coordinated by Dr. Hemavathi, Assistant Professor, Dept., of ECE.



April 30, 2024: Dr. Vasundhara Patel K S, Professor, Department of Electronics and Communication Engineering published a research paper titled ‘**Quad Port MIMO Circularly Polarized Antenna for n77/n78 5G Coverage with Spatial and Polarization Diversity**’ in the Journal of Wireless Personal Communications.

DOI: 10.1007/s11277-024-11089-0.
<https://link.springer.com/article/10.1007/s11277-024-11089-0>.

MAY -2024

May 02, 2024: Department of Electronics and Communication Engineering in association with Texas Review organised a talk on '**Higher Education and Career Prospects Abroad**' for all pre-final year ECE students. Mrs. Soujatha R, Business Development Manager, Texas Review was the invited resource person and Dr. Hemavathi, Assistant Professor, Dept., of ECE was the faculty coordinator.



May 05, 2024: Mrs. Priyadarshini Jainapur, Mr. Sandeep S and Mrs. K Poornima Kamath, Assistant Professors, Department of Electronics and Communication Engineering published a research paper titled '**Intelligent Ambient Light-Controlled Street Lighting System for Power Optimization**' in the International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREEICE).

DOI: 10.17148/IJIREEICE.2024.12536.

ISSN (O) 2321-2004, ISSN (P) 2321-5526.

May 17, 2024: IEEE COMSOC student chapter Department of Electronics and Communication Engineering hosted '**Chronoclash**' an intriguing Stage drama murder mystery event tailored for students on the occasion of UTSAV 2024. The event provided an immersive and thrilling experience, encouraging teamwork, critical thinking, and dramatic engagement among participants.



May 20, 2024: The Department of Electronics and Communication Engineering concluded two in house internship held from 19th of February to 20th May 2024 titled:

- **Antenna Designs using Commercial Software.** Dr. Siddappaji, Professor and HOD, Dr. Karthikeya G. S, Dr. Feroz Morab and Mr. Eesha D, Assistant Professors, Dept., of ECE were the resource persons.
- **Unlocking FPGA Potential–Comprehensive internship with Basys3 and PYNQ FPGA Boards using Vivado.** Dr. R Jayagowri, Associate Professor, Dr. Jeeru Dinesh Reddy and Mrs. Radha R C, Assistant Professors, Dept., of ECE were the resource persons.



May 23, 2024: Department of Electronics and Communication Engineering in association with R&D centre with IEEE Antennas and Propagation Society SBC organised a talk on ‘**Medical Applications of MHz to sub-THz Waves and EMI/EMC Challenges**’ for the students of ECE department. The invited resource person was Mr. Shibhan Koul, Professor, Emeritus, IIT Delhi and Dr. Karthikeya G S, Assistant Professor, Dept., of ECE was the faculty coordinator.



May 27, 2024: The IEEE Communication Society Club, Department of Electronics and Communication Engineering hosted a '**Handover Ceremony**' to mark the transition of leadership roles to newly elected representatives. This event marks the culmination of the outgoing committee's term and the beginning of a new chapter for the club. The event was witnessed by Dr. Siddappaji, Professor and HOD, faculty coordinator Dr. Jayanthi k Murthy and faculties from the department.



May 29, 2024: Department of Electronics and Communication Engineering organized '**Project Open Day AYASKANTHA-2024**'. Open-day is a technical exhibition from 8th-semester students to showcase the projects completed during the final year. A total of 56 projects were exhibited by the 2023-24 final year student's community. The best five projects were identified and awarded by industry/academic experts. Dr. Radha B L, Professor from BIT was invited as the evaluator.



JUNE 2024

June 08, 2024: Dr. Shachi P, Assistant Professor, Department of Electronics and Communication Engineering was invited as one the '**Judges**' in Hackathon event '**EDU-VITALITY**' organized by IEEE-Comsoc, RVCE in collaboration with IEEE Comsoc Bangalore Chapter, and Intel Technology India.



June 11, 2024: Department of Electronics and Communication Engineering conducted Arduino Bootcamp, the flagship event of ELSOC from 11th – 18th of June 2024 at the seminar hall in the department. The workshop provided a comprehensive introduction to the world of electronics, equipping participants with hands-on experience and the instructors for the workshop were the 6th semester students from the department. Dr. Archana H R, Assistant Professor, Dept., of ECE was the faculty coordinator.



June 13, 2024: Dr. Madhusudan K N, Assistant Professor, Department of Electronics and Communication Engineering was invited as '**Jury**' for the '**Technical Paper Presentation and Line Follower**' in the Technical fest '**GETOCS**' organized by the Dept., of ECE, Gopalan College of Engineering and Management, Bangalore.



June 13, 2024: Mr. A J Ilaya Bharathi, UG student, Department of Electronics and Communication Engineering under the guidance of Dr. K N Madhusudan, Assistant Professor from the Dept., presented a technical paper titled '**Smart Reader for Visually Impaired**' in the event 'Technical Paper presentation' the Intercollegiate Technical Fest conducted by Dept., of ECE, Gopalan College of Engineering and Management, Bangalore.



June 29, 2024: Dr. Veena M B, Professor, Department of Electronics and Communication Engineering along with PG students, Ms. Nayana V S and Ms. Shreya S K published a journal paper titled '**Development of In-Memory Wallace Tree Architecture using Block RAM**' in International Journal of Emerging Technology and Advanced Engineering, Volume 14, Issue 06, June 2024, ISSN 2250-2459.
