



# Bapuji Institute of Engineering and Technology, Davangere-577004 Accredited by NBA & NAAC with 'A' Grade

# EC JOURN

#### BITECH VOICE NEWSLETTER OF ECE DEPARTMENT

**Volume - 7, Issue - 1 July – December 2023** 

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# **Inside the Issue**

- Department Activities
- Student Achievements /Activities
- Faculty Achievements /Activities
- Literary Contribution
- Alumni Corner

# **Quote Corner**

"Chandrayaan-3is a testament to the power of human ingenuity and perseverance." -Sudha Murthy

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Vision: To be in the forefront in providing quality technical education and research in Electronics & Communication Engineering to produce skilled professionals to cater to the challenges of the society.

#### Mission:

- M1. To facilitate the students with profound technical knowledge through effective teaching learning process for a successful career.
- M2. To impart quality education to strengthen students to meet the industry standards and face confidently the challenges in the program.
- M3. To develop the essence of innovation and research among students and faculty by providing infrastructure and a conducive environment.
- M4. To inculcate the student community with ethical values, communication skills, leadership qualities, entrepreneurial skills and lifelong learning to meet the societal needs.

### **Electronics in Chandrayaan-3: Part-1**

Chandrayaan-3 consists of an indigenous Lander Module (LM), Propulsion Module (PM) and a Rover with an objective of developing and demonstrating new technologies required for Inter Planetary Missions. The Lander will have the capability to soft land at a specified lunar site and deploy the Rover which will carry out in-situ chemical analysis of the lunar surface during the course of its mobility. Lander and the Rover have scientific payloads to carry out experiments on the lunar surface. To achieve the mission several advanced technologies are present in Lander such as Laser & RF based Altimeters - an altimeter or an altitude meter is an instrument used to measure the altitude of an object above a fixed level.



Laser Doppler Velocimeter=also known as Laser Doppler Anemometry, is the technique of using the Doppler shift in a laser beam to measure the velocity in transparent or semi-transparent fluid flows or the linear or vibratory motion of opaque reflecting surfaces

#### From HOD's Desk

The Department is bringing the Volume 7, Issue 1, of **BITECH VOICE NEWSLETTER OF ECE DEPARTMENT**. The Department started PG Program M. Tech in *IOT and* **Sensor Systems** from the academic year



2023-24, to cater the need of engineering graduates from various disciplines. The students of the Department are encouraged to carry the innovative projects.

- . I am glad to share that our distinguished alumnus Sri. Shivakumar S. Patil, Scientist/Engineer SG, from ISRO,U R Rao Satellite Centre, Bangalore, visited the Department and interacted with the faculty.
- I congratulate Rakshith Gouda Patil, Rohan A M, Sanmati S Satabhai, and Mallikarjun M Koppad, for receiving the *Best Project of the Year* award by KSCST in the state level 46th SPP Project Exhibition.

I congratulate Sneha S Chavadi, Shreenikha H S, Shashank M Jadhav, and Shreehari G V, for qualifying to the final round in the Inventors Challenge 2023 Project competition.

In view of skill development for students, a three day technical session for IV Semester was conducted on AI and its Core topics by Infosys Springboard.

#### **DEPARTMENT ACTIVITIES**

➤ VII Semester Students participation in placement activity held on 16<sup>th</sup> December 2023.



Placement activity on 16th December 2023

➤ Distinguished Alumni visit to the Department on 9<sup>th</sup> December 2023.



Alumni visit on 9th December 2023

➤ Interaction of Alumni with students on 9<sup>th</sup> December 2023.



Alumni interaction on 9th December 2023

➤ Inauguration of FDP on Mastering IoT: Hands on Training for Sensors Integration, Devices and Cloud services on 4<sup>th</sup> December 2023.



Inauguration of FDP on 4<sup>th</sup> December 2023.

➤ Dr.Kirankumar G H accompanied V & VII Semester students to attend Bangalore Tech Summit on 29<sup>th</sup> November 2023.



Bangalore Tech Summit

➤ MoU with EakTech Pvt. Ltd. on 21<sup>st</sup> November 2023.



MoU with EakTech Pvt. Ltd.

➤ Orientation Day and Parents' Meet for III Semester on 18<sup>th</sup> November 2023.



Orientation Day and Parents' Meet

➤ Mr. Sharath & Ms. Kavya of COPPER AGE Study Centre- Conducted Add-on course for III semester students, in order to provide training in **Communication and Soft skills** from 18<sup>th</sup> November 2023.



Mr. Sharath & Ms Kavya of COPPER AGE Study Centre

Farewell to Dr. Ganesh K and Ms. Sucharitha S D on 10<sup>th</sup> November 2023.



Farewell to Dr. Ganesh K



Farewell to Ms. Sucharith S D

Virtual Meet-2 with Mr. Paul Kaunds, Senior Vice-President, VTools-Smart Verification, UK for Final Year Students on 27th October 2023.



Virtual Meet-2 with Mr. Paul Kaunds

➤ Internship on VLSI-ASIC Design & Verification, Embedded Domain - Image Processing with Raspberry Pi, and Azure – IoT for IV semester organized from 26<sup>th</sup> October to 22<sup>nd</sup> November, 2023.



Internship on VLSI



Internship on Embedded system



Internship on Azure-IoT

➤ MoU with Expolog on **VLSI Design and Verification** domain on 26<sup>th</sup> October 2023.



MoU with Expolog

Faculty-Students Interaction session on 6<sup>th</sup> October 2023 to provide information regarding setting up of Semicon Innovative Lab & Training Programs in VLSI Domain by VTools, Bengaluru.



Faculty-Students Interaction session

A session on Semiconductors by Mr. PaulKaunds, Founder & CEO, P&C Tech Consultants Pvt. Ltd., Workingham, United Kingdom, Alumnus -1996 Batch, on 5<sup>th</sup> October 2023.



A session by Mr. PaulKaunds

Alumnus Mr. Kshithij addressed VII semester students on Satellite Communication on 5<sup>th</sup> October 2023.



Mr. Kshithij address to VII semester students

➤ Technical talk on "Exploring Joget Platform" under Gnana Vruddhi Lecture series by Mr. Mahantesh H on 30<sup>th</sup> October 2023.



Gnana Vruddhi lecture by Mr.Mahantesh H

A CSR Initiative by Cognizant on Microsoft Azure AI Engineer Associate, Woman Empowerment Program organized by Cognizant Foundation in association with ICT academy and BIET from 9<sup>th</sup> to 27<sup>th</sup> October 2023.



Woman Empowerment Program

➤ Program Coordinator Dr. G S Sunitha along with faculty interacted with the 1<sup>st</sup> year students during students visit to the Department on 15<sup>th</sup> September 2023.



Interaction of HoD Dr. G S Sunitha with 1st year students

➤ Ms. Radhika Priya Y R, presented a talk on **Placement Activity** in the Institute during Student Induction Program on 14<sup>th</sup> September 2023.



Talk by Ms. Radhika Priya Y R

- ➤ Prof. Ashalatha M E delivered a talk on **Grievance Redressal Mechanism in Campus** during Student Induction Program on 12<sup>th</sup> September 2023.
- ➤ Sri. Shivakumar S. Patil, Scientist/Engineer SG, from ISRO-U R Rao Satellite Centre, Bangalore, alumnus visited the Department on 11<sup>th</sup> September 2023, and interacted with all the faculty.



Sri. Shivakumar S. Patil visit to the Department

➤ Three day technical session for IV Semester students conducted on **AI and its Core topics by Infosys Springboard** from 28<sup>th</sup> to 30<sup>th</sup> August 2023. Thirty six students have attended and certified.



Technical session on AI and its Core topics

➤ A talk under Gnana Vruddhi Lecture Series on A Robust Node Localization Scheme for Mobile Communication Network by Dr. Pavan Kumar D on 26<sup>th</sup> August 2023.



Gnana Vruddhi Lecture by Dr. Pavan Kumar D

➤ Technical talk on Generative AI (Chat GPT) for Teaching, Learning, Evaluation and Accreditation in Engg. Education under Gnana Vruddhi Lecture Series by Dr. Ganesh K on 18<sup>th</sup> August 2023.



Gnana Vruddhi Lecture by Dr. Ganesh K

➤ Prof. Dr. B M Jayadevappa was felicitated by the Department on his retirement on 31<sup>st</sup> July 2023.



Felicitation to Prof. Dr. B M Jayadevappa

Skill Development Program for 1<sup>st</sup> year P-Cycle students (2nd Semester) on Simple Electronic Circuits and their Applications was organized from 24<sup>th</sup> July 2023 to 1<sup>st</sup> August 2023.



Skill Development Program Schedule

➤ Internship awareness program was organized by the Department on 22<sup>nd</sup> July 2023 by various companies.



Internship awareness program

➤ Infosys Springboard Application awareness program conducted by Pruthvi Adishesha for IV semester students on 20<sup>th</sup> July 2023.



Awareness program by Pruthvi Adishesha

➤ Hands on Workshop on Embedded Systems with ARM-STM32 Microcontroller for IV semester students from 17<sup>th</sup> to 22<sup>nd</sup> July 2023.



Workshop on Embedded Systems with ARM-STM32

➤ Add-on course on **Microcontroller 8051 & Embedded C** for IV semester students from 5<sup>th</sup> to 10<sup>th</sup> July 2023.



Add-on course on Microcontroller 8051

# STUDENT ACHIEVEMENTS ACTIVITIES

➤ Abdul K Jilani, Dayanand, Shrinivas and Shreyas of V Semester students participated in PLASMA 2K23 (State Level Technical Symposium) organized by JNNCE, Shivamogga for Roborace and Line Follower event on 23<sup>rd</sup> December 2023.



PLASMA 2K23



PLASMA 2K23

The project titled **The Eye Directive Wheel Chair**, carried by Sneha S Chavadi, Shreenikha
H S, Shashank M Jadhav, and Shreehari G V,
under the guidance of Dr. Leela G H, has been
qualified for final round presentation in the
Inventors Challenge 2023 project competition
at Noida on 20<sup>th</sup> November 2023.



Inventors Challenge 2023 Project Demo

- Three students have qualified in NPTEL exams July-September 2023.
- ➤ Bhagya S R, Bindu B A, Nikhil P Tarikoppa and Sowmya K have published a paper titled **Solar Powered Water Trash Collector**, in IJIRCCE, Volume 11, Issue 9, September 2023 under the guidance of Ms. Savithri G R.

➤ Project titled **Hot Beverage Vending Machine** carried by Rakshith Gouda Patil, Rohan A M, Sanmati S Satabhai, and Mallikarjun M Koppad, under the guidance of Dr. G S Sunitha has won the **Best Project of the Year** award by KSCST in the state level 46th SPP Project Exhibition held at AIET, Moodbidri on 12<sup>th</sup> August 2023.



Best Project of the Year award by KSCST

➤ Prajwal Y. Shirageri secured VTU 6<sup>th</sup> Rank, has received Padmabhushan Dr. M C Modi Merit Prize, Prof. G S Shivanna Merit Prize for best outgoing student, and Akash Yogeshwar Merit Prize.



- Latha M has received Smt. Mudegowdra Savithramma Merit Prize and also Akash Yogeshwar Merit Prize.
- Anushree B N has been awarded with BE Honors Degree by VTU for the academic year 2022-23.





- Aditya Kumar, Darshini B S, Rajeshwari G S and Sukumar Swamy H S have published a paper titled, **Defence Camoflage Robot** in IJIRCCE, Volume 11, Issue 8, August 2023, under the guidance of Ms. Bhagya Shanthakumar.
- Akash R P, C G Balaji Vaishnav Singh, Isahaq Ahamed Beig and Lucky Jain have published a paper titled, **An Easy Learning App for Kids Learning Disabilities** in IJIRCCE, Volume 11, Issue 7, July 2023 under the guidance of Ms. Suman B S.

#### Placement Details:

| Company      | No. of Students |  |
|--------------|-----------------|--|
| SLK          | 02              |  |
| Tessolve     | 01              |  |
| VIBs Infosol | 01              |  |
| Pvt. Ltd.    | 01              |  |

#### FACULTY ACHIEVEMENTS / ACTIVITIES

- ➤ Prof. Ashalatha M E delivered Expert Lecture sessions on **Introduction to Embedded Systems** to VII Semester Mechanical Engineering students from 27<sup>th</sup> to 29<sup>th</sup> November 2023.
- ➤ Dr. G S Sunitha , Coordinator , Entrepreneurship Development Cell, in association with IIC, BIET organized Awareness program on Entrepreneurship and ED Cell for the first year students on 27th & 28th November 2023.



Awareness program on Entrepreneurship and ED Cell

- Dr. Leela G H published a paper titled IoT-Based Monitoring System for Crop Parameters in Greenhouse in International Journal of Science & Engineering Development Research, Vol. 8, Issue 11 in November 2023.
- Dr. Nirmala S O, Dr. Leela G H, Aniketh V, Dharani S have published a paper titled **Design** of SRAM Memories with Different Topologies in International Journal of Science & Engineering Development Research, Vol. 8, Issue 10 in October 2023.
- Ms. Radhikapriya Y R has delivered a talk on Sensors and its Applications for Second year E&C Students, at Bapuji Polytechnic, Davangere on 18th October 2023.

- Ms. Shwetha S has delivered a talk on Instrumentation Amplifier for Second year E&C Students, at Bapuji Polytechnic, Davangere on 17<sup>th</sup> October 2023.
- Ms. Savithri G R has delivered a talk on VLSI Design flow for Second year E&C Students, at Bapuji Polytechnic, Davangere on 16<sup>th</sup> October 2023.
- ➤ Dr. Kiran Kumar G H has delivered a talk on **Application on modulation techniques and filtering** for Second year E&C Students, at Bapuji Polytechnic, Davangere on 15<sup>th</sup> October 2023.
- Program Coordinator Dr. G S Sunitha coordinated with ED Cell to organize an awareness workshop on Entrepreneurship and Career skills on 10<sup>th</sup> October 2023 for Business Community and students.



Entrepreneurship and Career skills discussions

- Ms. Suma K G, Bharatha B, Bhoomika B R, Sampada M, Darshan have published a paper titled Smart Digital Height Measurement System in IJAEM Volume 5 Issue 10 in October 2023.
- ▶ Dr.Prakash K M, Manoj R S, Ramesh N, Megha Patri, Latha M have published a paper titled Women Safety Cab in International Research Journal of Modernization in Engineering Technology & Science, Vol.5, Issue 10 October 2023.
- ➤ Dr. Pavan Kumar D Mr. Mahantesh H have published a paper titled A Smart Four Wheel Electric Mobility for Physically Disabled International Research Journal of Modernization in Engineering Technology & Science, Volume 5 Issue 10, October 2023.
- ➤ Ms. Bhagya S. & Ms. Savithri G R, qualified in NPTEL Course on **System Design through Verilog in** July-September 2023 NPTEL exam.

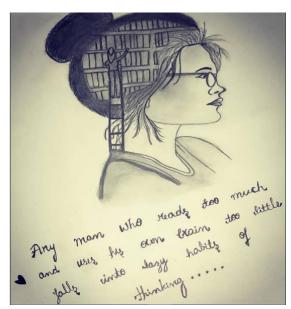
- Dr. Pavan Kumar D was Reviewer for International Conference on Evolutionary Algorithms and Soft Computing Techniques (EASCT-2023) on 15th September 2023.
- Dr. Pavankumar D has attended Workshop on Machine Learning organized by AISSMS, PUNE on 14<sup>th</sup> September 2023.
- > Dr. Prakash K M, Dr. Kiran Kumar G H, Dr. Avinash K G, Dr.Banumathi K L, I K, Mr. Mahendrachari, Mr. Yogesh K O, Mr. Mahantesh, Ms. Shwetha S. Ms. Suman B S, Ms. Poornima G N, Ms. Sucharith S D, and Ms. Nirmala G, attended FDP on Emerging Trends in Signal Processing, **Image Processing** and Artificial Intelligence, organized by Department of E&CE, SJMIT, Chitradurga, from 12th to 16th September 2023.
- Ms. Sucharitha S D, attended FDP on Power System Design & Analysis using DigSilent Power Factory Software, organized by DellSoft Technologies, Bengaluru, on 11<sup>th</sup> September 2023.
- All faculty attended FDP on Skill for Quality Research and Publications, organized by BIET, Davangere, from 8th to 9th September 2023.
- ➤ Ms. Suma K G and Dr. Banumathi K L have attended FDP Outcome based education and essential AI tools for teachers organized by Department of CS&E, Kerala from 2<sup>nd</sup> to 9<sup>th</sup> September 2023.
- ▶ Dr. Nirmala S O, and Ms. Shwetha S, attended FDP on Microsoft Azure AI Engineer Associate organized by ICT Academy, BIET Davangere, from 28<sup>th</sup> August to 1<sup>st</sup> September 2023.
- Ms. Savithri G R has published a paper titled **Solar Powered Water Trash Collector**, in IJIRCCE, Volume 11, Issue 9, September 2023.
- ➤ Ms. Bhagya Shanthakumar has published a paper titled, **Defence Camoflage Robot** in IJIRCCE, Volume 11, Issue 8, August 2023.

- ➤ Ms. Suman B S has published a paper titled, An Easy Learning App for Kids Learning Disabilities in IJIRCCE, Volume 11, Issue 7, July 2023.
- ➤ Ms. Sumana B S, has published a paper titled An Economic Approach to Build Controller Based Generic Purpose Development Board, IJRASET, Volume11, Issue VII, July 2023.
- ➤ Dr. Kiran Kumar G H, has published a paper titled **Deep Learning Approach for Detection of Dental Caries in X-Ray Images**, IJSDR, Volume 8, Issue VII, June 2023.

#### LITERARY CONTRIBUTIONS



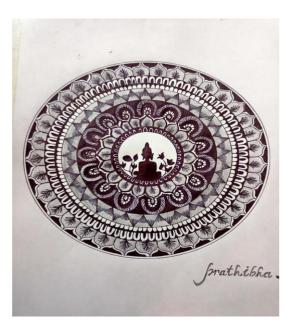
Bhumika N (4BD20EC402)

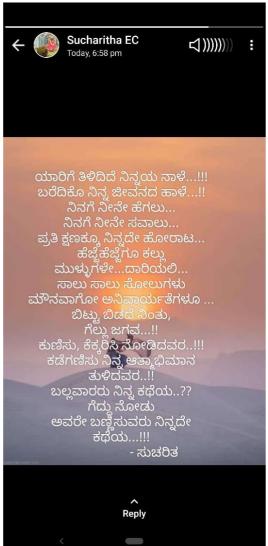


Ruchita P (4BD19EC093)

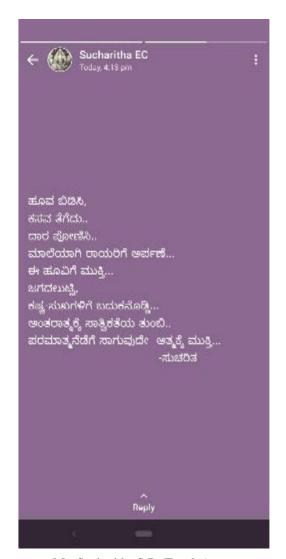


Prathibha P (4BD20EC053)





Ms. Sucharitha S D (Faculty)



Ms. Sucharitha S D (Faculty)

#### ALUMNI CORNER

Dr. Santhosh Onkar Analog Technical Lead of Pre Silicon and Post Silicon Design Verification, Netherlands



Dr. Santhosh Onkar is a semiconductor professional with 18+ years of Research & Development experience. He has a Masters in Electronics from NTU, Singapore, and PhD from CEA-LETI, France. He has comprehensive exposure to most of aspects of Chip Design ranging from Device Conception, Implementation and Production, having worked on Mixed-Signal modeling, IP and SoC Design, Layout, etc.

Currently he is an Analog technical lead of Pre-Silicon and Post-silicon design verification.

In his free time he writes articles for magazines on semiconductor topics, reviews journal/conference articles, ideates technical strategies and consulting for Startups.

#### **Institute Vision**

To be center of excellence recognized nationally and internationally in distinctive areas of engineering education and research, based on a culture of Innovation and invention.

#### Institute Mission

BIET contributes to the growth and development of its students by imparting a broad based engineering education and empowering them to be successful in their chosen field by inculcating in them positive approach, leadership qualities ethical values.

# **Institution Quality Policy**

- Inculcating the concepts of discipline, punctuality and ethics into the thought process of students to promote their overall growth.
- Motivating teachers to impart knowledge, continuous interaction with students.
- Carrying out objective evaluation of student's performance.
- Enhancing the academic skills of the faculty through faculty development programs.
- Creating an atmosphere conducive to research in the campus.

# List of faculty of the Department

| Sl. No. | Faculty                 |
|---------|-------------------------|
| 1       | Dr. G S Sunitha         |
| 2       | Dr. B M Jayadevappa     |
| 3       | Prof. Ashalatha M E     |
| 4       | Dr. Leela G H           |
| 5       | Dr. Nirmala S O         |
| 6       | Dr. Avinash K G         |
| 7       | Dr. Prakash K M         |
| 8       | Dr. Kirankumar G H      |
| 9       | Ms. Suma K G            |
| 10      | Ms. Savithri G R        |
| 11      | Ms. Radhikapriya Y R    |
| 12      | Dr. Banumathi K L       |
| 13      | Ms. Bhagya Shanthakumar |
| 14      | Mr. Ali I K             |
| 15      | Dr. Ganesh K            |
| 16      | Ms. Shwetha S           |
| 17      | Mr. Mahendrachari       |
| 18      | Ms. Shubha V Patel      |
| 19      | Ms. Poornima G N        |
| 20      | Ms. Suman B S           |
| 21      | Mr. Yogesh K O          |
| 22      | Ms. Sucharitha S D      |
| 23      | Ms. Vanishree H V       |
| 24      | Ms. Nirmala G           |
| 25      | Dr. Pavan Kumar D       |
| 26      | Mahantesh Havagar       |