

Centenary Celebrated Sharnbasveshwar Vidya Vardhak Sangha's



Prof. Dr. Subodh C. Appa
Chairman, Sharnbasveshwar Vidya Vardhak Sangha
Karnataka, Bangalore



Prof. Dr. Channarayana Doddappa Appa
Vice-Chairman, Sharnbasveshwar Vidya Vardhak Sangha
Karnataka, Bangalore



Prof. Dr. Sharnbasveshwar Appa
President, Sharnbasveshwar Vidya Vardhak Sangha
Karnataka, Bangalore

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Sharnbasva
Kalaburagi-585 103
Karnataka-India
Estd.: 2017



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University
ಕಲಬುರಗಿ-585 103
ಕರ್ನಾಟಕ-ಭಾರತ
ಸ್ಥಾಪನೆ : 2017



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FACULTY OF ENGINEERING AND TECHNOLOGY (EXCLUSIVELY FOR WOMEN)

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Department Magazine 2023-24

GNYANA ECE INNOVATIONS



Poojya Dr. Sharnbaswappa Appa Chancellor, Sharnbasva University, Kalaburagi



Poojya Dr. Sharnbaswappa Appa

The field of Electronics and Communication Engineering is at the heart of the technological revolution that continues to shape the future of industries worldwide. It is inspiring to see how your department is contributing to the advancement of knowledge, fostering creativity, and preparing the next generation of leaders in this exciting domain.

Through your research, projects, and collaborations, you are not only creating a rich academic environment but also making meaningful contributions to society. I am particularly proud of how the department continues to push boundaries in various areas such as signal processing, telecommunications, embedded systems, and more.

I encourage all of you students, faculty, and staff to continue embracing innovation, teamwork, and a commitment to excellence. Let this magazine be a reflection of the bright future you are all helping to build. May it inspire new ideas, foster intellectual curiosity, and showcase the dynamic talent within your department. I convey my best wishes for the success of GNYANA ECE Innovations.

Poojya Matoshree Dr. Dakshayini S. Appa
Chairperson,
Sharnbasveshwar Vidya
Vardhaka Sangha



Poojya Matoshree Dr. Dakshayini S. Appa

Innovation requires passionate explorers to propel transformation at the workplace. With an ever-changing global scenario, the key to success is responding to the complex and rapidly changing in the field of electronics.

Electronics and Communication Engineering is a field that is constantly evolving, with emerging technologies shaping the way we communicate, interact, and experience the world. As we witness groundbreaking advancements in fields like AI, IOT, 5G, and beyond, it is crucial for us to not only embrace these changes but also to lead them. The future of technology depends on the passion, creativity, and dedication of the next generation of engineers, and it is inspiring to see how our department continues to contribute to this vision.

Wishing you all continued success and fulfillment in your academic and professional journeys.



As technology continues to advance at an unprecedented rate, the role of Electronics and Communication Engineers in shaping the future becomes increasingly vital. The department's unwavering commitment to excellence in teaching, research, and industry collaboration provides our students with the tools and knowledge needed to thrive in this fast-paced, ever-evolving sector.

This magazine serves as a wonderful reflection of the hard work and enthusiasm of our students and faculty. It provides a platform for sharing ideas, projects, and research that contribute to the global conversation on emerging technologies. It is inspiring to see how our department continues to produce future leaders who will drive innovations in fields such as telecommunications, embedded systems, signal processing, and beyond.

I look forward to witnessing your continued success and the remarkable impact you will have in the world of Electronics and Communication Engineering.

Dr. Nagaveni K
HOD, ECE, FETW
Sharnbasva University



Electronics is a rapidly evolving field, shaping the future of technology and innovation. Our students and faculty continuously push boundaries through research and hands-on projects. This magazine serves as a platform to showcase their creativity, knowledge, and achievements. With advancements in AI, IOT, and communication systems, the scope of electronics is limitless. We encourage students to embrace curiosity, experiment, and apply their learning to real-world problems. Our department remains committed to fostering an environment of excellence and collaboration. I sincerely appreciate the efforts of the editorial team and all contributors for their dedication.

Your hard work and passion make this magazine a valuable source of inspiration and knowledge. May this edition ignite new ideas and motivate you to excel in your academic journey. Let us continue to innovate and contribute to the ever-evolving world of technology.

VISION & MISSION



**FACULTY OF ENGINEERING & TECHNOLOGY
(EXCLUSIVELY FOR WOMEN)**

**DEPARTMENT OF ELECTRONICS & COMMUNICATION
ENGINEERING**

VISION

To nurture women professionals through quality education, ethical values and expertise in electronics and communication engineering skills, enabling them to make contribution to society.

MISSION

- **Mission 1:** To provide a competent academic foundation in electronics and communication engineering, through comprehensive curricula.
- **Mission 2:** To promote research, innovation, and industry relevant skills enabling students to develop solutions for real-world problems.
- **Mission 3:** To create a supportive learning environment that inspires women to pursue entrepreneurship and make meaningful contributions to society.
- **Mission 4:** To foster ethical values in women professionals, to address global challenges with integrity and responsibility.



Electronics and Communications Engineering

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Events



Frontiers in Cloud Computing, Artificial Intelligence, Machine Learning & Internet of Things

Organized by: Department of Electronics and communication Engineering

Date: 12th – 16th March 2024

Mode: Expert Lecture Series

Objective:

To provide in-depth understanding and exposure to emerging technologies like Cloud Computing, Artificial Intelligence (AI), Machine Learning (ML), and Internet of Things (IoT).

Resource Persons:

- Dr. Mrs. Rukmini S, Senior Grade Lecturer, Government Polytechnic, Kalaburagi
- Prof. T. Swapna, Assistant Professor & Resource Person, Department of CSE, GNITS, Hyderabad
- Dr. Deepamala N, Associate Professor, Department of CSE, RV College of Engineering, Bengaluru

Topics Covered:

- Fundamental principles of AI, ML, IoT, and Cloud
- Real-world applications and case studies
- Future career opportunities and research areas

Audience: UG and PG students of Dept. ECE

Student Feedback: Students appreciated the clarity and practical approach of the sessions, which enhanced their understanding of industry trends.

Faculty Coordinator: Dr. Asharani Patil

Student Coordinators: Shivani Indi

One-Day Seminar on “Overview of Geo-Spatial Image Analysis using Satellite Images”

Organized by: Department of Electronics and communication Engineering

Date: 11th April 2024

Mode: Seminar

Objective:

To familiarize students with geo-spatial image analysis and its importance in real-world applications.

Resource Person:

- Dr. Rubina Parveen, Principal, Government ITI for Women, Kalaburagi (Under Commissioner ate of Industrial Training and Employment)

Topics Covered:

- Basics of Satellite Imagery
- Image Interpretation and Classification Techniques
- Applications in Urban Planning, Agriculture, and Disaster Management

Audience: Students from multiple engineering disciplines

Total Participants: 50

Student Feedback: The session was informative and introduced students to a niche but growing field of technological relevance.

Faculty Coordinator: Dr. Asharani Patil

Student Coordinators: Nikita



Techno Spectrum – Project Presentation (Jnanotsava-2K24)

Organized by: Department of Electronics and Communication Engineering

Date: 26th April 2024

In Association With: IBM Innovation Center of Education and CADMAXX

Mode: Project Presentation

Objective:

To provide students a platform to showcase their technical innovations and strengthen their presentation skills.

Panel Members / Judges:

- Dr. Shridhar K, Assistant Professor, PDACE, Kalaburagi
- Prof. Veeresh Goni, Medini Technologies, Kalaburagi

Event Format:

Project exhibitions with live demos and Q&A by evaluators. Students presented prototypes and working models across domains such as IoT, Automation, Communication Systems, and Embedded Technologies.

Audience: Final year ECE students

Total Projects Presented:

Student Feedback: Students appreciated the opportunity to interact with industry experts and receive constructive feedback on their work.

Faculty Coordinator: D. Asharani Patil

Student Coordinators: Bhagyashree

Career Guidance on Benefits of Early Career Planning

The Department of Electronics and Communication Engineering, FETW,SUK, conducted an insightful **Career Guidance Session on “Benefits of Early Career Planning”** on **7th January 2024**, aimed at empowering students to take proactive steps toward building a successful professional future.

Event Format:

The session was conducted in seminar mode and featured a guest speaker presentation, real-life success stories, and a Q&A segment. Students were actively engaged in discussions about setting career goals, identifying interests, and leveraging opportunities early in their academic journey.

Objective:

The primary objectives of the session were to:

- Educate students on the importance of setting career goals early.
- Guide them in identifying skill gaps and planning internships, certifications, or further studies accordingly.
- Motivate them to explore diverse career paths through structured planning.

Highlights:

Speaker: Dr. Basanti Ghanti

Designation: Professor, Sharnbasva University, FETW (ECE Dept.)

Topics Covered:

- Steps in Early Career Planning
- Aligning Skills with Industry Requirements
- Importance of Networking, Internships, and Certifications
- Tools & Resources for Career Road mapping
- **Audience:** ECE final year students
- **Total Participants:** 80

Student Feedback: Students found the session highly relevant and motivating. It helped them gain clarity on where to begin and how to strategically approach their goals over the next few academic years.

Faculty Coordinator: Prof. Shobhana

Student Coordinators: Shakti

This session served as an important reminder that **early planning is key to long-term success**, helping students take confident steps toward building fulfilling and future-ready careers.



8RHC+QQR, Vidya Nagar, Sharananagar, Kalaburagi, Karnataka
585105, India

Latitude
17.3296563°

Longitude
76.822021°

Local 10:38:41 AM
GMT 05:08:41 AM

Altitude 468 meters
Sunday, 07-01-2024



3922, KHB Colony, Shanti Nagar, Kalaburagi, Karnataka
585103, India

Latitude
17.3293216°
Local 10:38:24 AM
GMT 05:08:24 AM

Longitude
76.8203778°
Altitude 467 meters
Sunday, 07-01-2024



8RHC+QQR, Vidya Nagar, Sharananagar, Kalaburagi,
Karnataka 585105, India

Latitude
17.32970725°
Local 10:40:03 AM
GMT 05:10:03 AM

Longitude
76.82177982°
Altitude 468 meters
Sunday, 07-01-2024

Rural Outreach Program

Organized by: Department of Electronics and Communication Engineering

Date: 9th July 2024

Venue: Government Primary and Higher Primary School, Mugnoor, Taluk Jewargi, Kalaburagi, Karnataka

Mode: Community Outreach

Objective:

To engage with rural communities and schools by promoting awareness about technology, education, and social responsibility, thereby bridging the urban-rural knowledge gap.

Chief Guest / Key Resource Person:

- Principal Mr. Shrishail Biradar, Government Primary and Higher Primary School, Mugnoor

Program Highlights:

- Interactive sessions with school students on basic science and technology
- Demonstrations and activities conducted by ECE students
- Distribution of educational materials
- Discussions with teachers on the importance of digital literacy and higher education

Audience: School students (Grades 1–8), school staff, and local community members

Total Beneficiaries: [Insert Number if available]

Student Feedback:

ECE students expressed that the program was both impactful and fulfilling. It provided them with an opportunity to contribute meaningfully to society and gain a deeper understanding of the role engineers can play in rural development.

Faculty Coordinator: Vanita K

Student Coordinators: Nisha

Outcome:

The Rural Outreach Program successfully fostered a sense of community engagement and educational empowerment. It reinforced the value of practical learning and social responsibility among engineering students.

District Level Declamation Contest on “My Bharat Viksit Bharat @2047

Organized by: Department of ECE

Date: 9th January 2024

Mode: Public Speaking Contest

Objective:

To inspire youth to envision and articulate their ideas for a developed India by 2047, fostering a spirit of patriotism, responsibility, and forward-thinking leadership.

Chief Guest / Resource Person:

- **Mr. Harshal Talaskar**, District Youth Officer

Event Highlights:

- Participants delivered impactful speeches on their vision for India's growth in sectors such as technology, economy, education, governance, and sustainability.
- The event encouraged students to reflect on the nation's progress and their own role in shaping its future.
- Thought-provoking ideas and passionate expressions made the contest highly engaging and competitive.

Audience: Students from various colleges across the district

Student Feedback: Participants found the platform empowering, helping them express their aspirations for a developed India. Many appreciated the opportunity to engage in meaningful civic discourse.

Outcome:

The contest successfully sparked awareness and enthusiasm among students about national development goals. It reinforced the belief that youth are the key drivers in building a “Viksit Bharat” by 2047.



International Seminar

Organized by: Department of Electronics and Communication Engineering

Date: 6th August 2024

Mode: International Guest Lecture / Seminar

Objective:

To provide students and faculty with global insights into advancements in science, technology, and interdisciplinary research, thereby expanding their academic and cultural horizons.

Guest Speaker:

- **Dr. Alessandro Vizzarri**, International Researcher and Academic Expert
(Additional designation/affiliation can be added if known)

Event Highlights:

- Dr. Vizzarri shared cutting-edge knowledge and perspectives from his ongoing research work, covering topics of international relevance in science and technology.
- The seminar emphasized cross-cultural academic collaboration and innovation-driven learning.
- A Q&A session allowed students to engage directly with the speaker, encouraging intellectual exchange.

Audience: Faculty and students from various departments

Total Participants:

Student Feedback:

Participants described the seminar as enlightening and inspiring. Many appreciated the global viewpoint and exposure to contemporary research trends beyond the local academic context.

Faculty Coordinator: Dr. Asharani Patil

Student Coordinators: Nikita

Outcome:

The **International Seminar** added immense value to the academic environment by fostering global connectivity and encouraging students to think beyond borders in their pursuit of knowledge and innovation.

Generation, Incubation and Commercialization of Ideas and Innovation

Organized by: Department of Electronics and Communication Engineering

Date: 20th January 2024

Mode: Seminar / Guest Lecture

Objective:

To educate students and faculty on the complete journey of transforming innovative ideas into successful commercial ventures, covering ideation, incubation, and market introduction.

Resource Person:

- **Dr. Manohar Madgi**, Professor, Department of Computer Science and Engineering, KLE Technological University, Hubballi

Event Highlights:

- Dr. Madgi presented the lifecycle of innovation from idea generation to incubation and finally commercialization.
- The session included strategies for nurturing innovative ideas, accessing incubation centers, and overcoming challenges in the startup ecosystem.
- Discussions on intellectual property rights, funding sources, and market strategies were also conducted.

Audience: Students and faculty from Computer Science, Electronics, and related departments

Total Participants: [Insert Number if available]

Student Feedback:

Attendees found the session highly motivating and practical, with many expressing renewed interest in entrepreneurship and innovation-led careers.

Faculty Coordinator: Dr. Basanti Ghanti

Student Coordinators: Swati

Outcome:

This seminar successfully inspired participants to actively pursue innovation and entrepreneurial initiatives, equipping them with essential knowledge to turn ideas into impactful business ventures.

One Day Seminar on “Design Awareness Program for MSMEs & Students

Organized by: Department of Electronics and Communication Engineering

Date: 7th February 2024

Objective:

To raise awareness among students and Micro, Small, and Medium Enterprises (MSMEs) about the importance of design thinking, innovation, and product development for business growth and competitiveness.

Resource Person:

- **Dr. T V Prabhakar**, Chief Research Scientist (DESE) and Principal Investigator (MSME-CoE)

Event Highlights:

- Dr. Prabhakar elaborated on design principles, product innovation, and strategies for MSMEs to enhance market reach and efficiency.
- The seminar included case studies demonstrating successful design applications in MSMEs and encouraged students to think innovatively.
- Interactive sessions helped participants understand how design can be a key differentiator in competitive markets.

Audience: Students and local MSME Representatives

Total Participants: 50

Faculty Coordinator: Laxmi Patil

Student Coordinators: Peamalata

Outcome:

The seminar successfully bridged the gap between academic learning and industry needs, inspiring students and MSME participants to embrace design for sustainable growth and innovation.



Career Guidance on how to prepare for GATE, GRE and GMAT

The Department of Electronics and Communication Engineering, FETW,SUK, organized a comprehensive **Career Guidance Session on “How to Prepare for GATE, GRE, and GMAT”** on **9th February**, aimed at assisting students in planning for competitive exams for higher studies and career advancement.

Event Format:

The session was conducted in seminar style, with expert talks, preparation strategies, and a Q&A segment. The speaker provided an in-depth comparison of the three exams and guided students on how to choose the right path based on their academic and career aspirations.

Objective:

The session focused on:

- Creating awareness about the structure, scope, and opportunities related to GATE, GRE, and GMAT.
- Helping students understand eligibility, exam patterns, and preparation timelines.
- Providing tips and resources to start early and plan effectively.

Highlights:

- **Speaker: Mr. Vinaykumar Murganoor**
Designation: software architect in Mercedes-Benz, Berlin, Germany.
Topics Covered:
 - Overview of GATE, GRE, and GMAT
 - Eligibility and Target Audience for Each Exam
 - Preparation Strategies and Time Management
 - Recommended Resources, Coaching vs. Self-study
 - Scholarships and Opportunities Post Exam
- **Audience:** pre-final-year students
- **Total Participants: 40**

Student Feedback: Students expressed that the session provided much-needed clarity on the exam options available for postgraduate studies and management careers. The comparison helped them evaluate their interests and academic strengths before choosing an exam path.

Faculty Coordinator: Prof. Shobhana

Student Coordinators: Vismaya

The event was a valuable step toward helping students become future-ready by preparing them for competitive exams that can open doors to prestigious institutions and global opportunities



GPS Map Camera



Google

Kalaburagi, Karnataka, India
8RHF+F9W, Vidya Nagar, Kalaburagi, Karnataka 585105, India
Lat 17.328831°
Long 76.823592°
09/02/24 02:50 PM GMT +05:30



GPS Map Camera



Google

Sharananagar, Karnataka, India
8RHC+QQR, Vidya Nagar, Sharananagar, Kalaburagi, Karnataka 585105, India
Lat 17.329652°
Long 76.822216°
09/02/24 02:51 PM GMT +05:30

Regional Hackathon

Organized by: Department of Electronics and Communication Engineering

Date: 1st August 2024

Mode: Hackathon Competition

Objective:

To foster problem-solving skills, teamwork, and innovative thinking among students by challenging them to develop creative solutions within a limited timeframe.

Resource Person / Chief Mentor: Shri Jagan Karthick

Event Highlights:

- Teams participated in a competitive hackathon focused on solving real-world technical challenges related to electronics, communication, and software applications.
- Participants utilized coding, hardware prototyping, and design thinking to build functional prototypes.
- Mentors provided guidance throughout the event, encouraging collaboration and innovative approaches.

Audience: Students from various departments including Electronics and Communication, Computer Science, and related fields

Student Feedback:

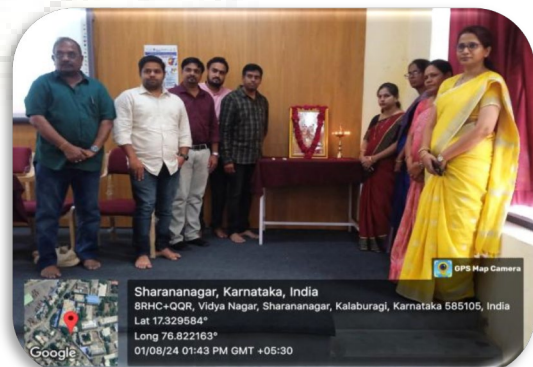
Students found the hackathon exhilarating and educational, praising the hands-on experience and opportunity to work under time constraints with peers.

Faculty Coordinator: Laxmi Patil

Student Coordinators: Sneha

Outcome:

The Regional Hackathon successfully nurtured creativity, technical competence, and teamwork, preparing students for real-world challenges and fostering a culture of innovation.



Industrial Visit to U R Rao Satellite Center Bengaluru

Organized by: Department of Electronics and Communication Engineering

Date: 11th August 2024

Mode: Industrial Visit / Educational Tour

Objective:

To provide students with firsthand exposure to advanced satellite technology, space research, and the functioning of a premier space research center.

Resource Person / Guide:

- **Mrs. Vidya Bharati**, Scientist, ISRO, Bengaluru

Visit Highlights:

- Detailed tour of the satellite assembly and testing facilities.
- Insightful presentations on current satellite projects and space missions by ISRO scientists.
- Interaction session allowing students to discuss career opportunities in space technology and research.
- Exposure to cutting-edge technologies and research methodologies employed at the center.

Audience: Final year students of [Insert Department Name] and related disciplines

Total Participants: 84

Student Feedback:

Students expressed great enthusiasm and inspiration from the visit, gaining valuable insights into space technology and the importance of research and innovation in the aerospace sector.

Faculty Coordinator: Shobhana

Student Coordinators: Sadhana

Outcome:

The industrial visit broadened students' perspectives on space technology, motivating many to consider careers in research and development in the aerospace and satellite communication fields.



Technical Pick and Talk

The Department of Electronics and Communication Engineering, FETW,SUK, organized a Technical Pick and Talk event on 12th January, to enhance student's communication skills, spontaneity, and subject knowledge in a fun and engaging format.

Event Format:

Participants picked a technical topic at random and were given 1 minute of preparation time, followed by 2 minutes to speak on the topic. Topics ranged from trending technologies such as *Artificial Intelligence*, *Blockchain*, *Cloud Computing*, to core subjects like *Thermodynamics* and *Digital Circuits*.

Objective:

The aim was to:

- Encourage students to express technical concepts confidently.
- Sharpen quick thinking and public speaking abilities.
- Promote peer learning through diverse topics.

Highlights:

- Total Participants: 40
- Audience: Open to all students from ECE Final year
- Judges: Dr. Shilpa Srigiri
- Winners were selected based on content, clarity, confidence, and coherence.

Winners:

- Savitra – Topic: *The Future of Quantum Computing*
- Shakti – Topic: *The Role of IoT in Smart Cities*
- Shivani Indi – Topic: *Augmented Reality in Education*

Faculty Coordinator: Prof. Geeta

Student Coordinators: Aneesha



Deepotsava on the Eve of Ram Lalla Prana pratishtapan at Ayodhya

Organized by: Student Council Members

Date: 22nd January 2024

Mode: Cultural and Religious Celebration

Objective:

To commemorate the sacred occasion of Ram Lalla Pranapratishtapan by organizing a Deepotsava, fostering spiritual awareness, cultural unity, and devotion among students.

Organizers: Student Council Members

Event Highlights:

- Lighting of traditional oil lamps (Deepotsava) symbolizing the victory of light over darkness and good over evil.
- Spiritual discourse and prayers dedicated to Lord Ram and the auspicious event in Ayodhya.
- Cultural performances including devotional songs and dance by students.
- Participation from faculty and students, promoting a collective spirit of reverence and celebration.

Audience: Students, faculty, and staff of ECE

Total Participants: 12

Student Feedback:

Participants expressed a deep sense of connection and joy, appreciating the opportunity to partake in such a meaningful cultural tradition.

Faculty Coordinator: Mrs. Laxmibai R

Student Coordinators: Nisha

Outcome:

The Deepotsava event strengthened community bonds, enhanced cultural understanding, and celebrated India's rich spiritual heritage within the campus.



ALUMNI TALK on Introduction to JAVA

The Department of Electronics and Communication Engineering, FETW,SUK ,organized an engaging **Alumni Talk** on the topic “**Introduction to Java**” on **15th December**. The session was conducted by one of our distinguished alumni to provide foundational knowledge in Java programming for students, especially those beginning their coding journey.

Event Format:

The session was conducted in a **lecture** where the speaker introduced core Java concepts, demonstrated simple code structures, and discussed real-world applications of Java in software development.

Objective:

The key goals of the talk were:

- To familiarize students with Java syntax, structure, and object-oriented concepts.
- To highlight the relevance of Java in current software development and placement preparation.
- To encourage students to start building projects using Java.

Highlights:

- **Speaker:** Pallavi S H, 2018 batch
Current Role: Java Trainee at J-Spiders

Topic Covered:

- Java Basics: Data types, Variables, Control Structures
- Object-Oriented Programming (OOP) in Java
- Sample Program Demonstrations
- Java in Industry and Career Relevance
- **Audience:** Primarily 2nd and 3rd year students
- **Total Participants:** 70

Faculty Coordinator: Prof. laxmi Patil

Student Coordinators: Sharanpabha

This talk served as a stepping stone for many students toward their programming journey, while also strengthening the alumni-student connect within the department.



Industrial visit to BUYU FOODS PVT.LTD. , Kalaburgi

Under Exploration and Field trip for problem Identification.

The Department of Electronics and Communication Engineering, FETW, SUK successfully organized an insightful **Industrial Visit to BUYU FOODS PVT. LTD., Kalaburgi** on 30th January 2024, offering students a firsthand understanding of industrial operations, food processing technologies, and corporate work culture.

Event Format:

The visit included a guided tour of the manufacturing facility, presentations by company professionals, and an interactive Q&A session. Students were exposed to real-time food processing systems and quality control measures followed in the industry.

Objective:

The visit was organized with the intent to:

- Bridge the gap between academic concepts and industrial practices.
- Help students understand food production workflows, automation, and safety standards.
- Inspire interest in the food technology and manufacturing sectors.

Highlights:

- **Industry:** BUYU FOODS PVT. LTD., Kalaburgi
- **Specialization:** Food Product Manufacturing and Packaging
- **Key Areas Observed:**
 - Raw Material Handling and Processing
 - Automation in Packaging and Labeling
 - Quality Control and Safety Standards
 - Supply Chain & Logistics in Food Industry
- **Audience:** Third Year ECE students
- **Total Participants:** 84 students + 2 faculty
- **Company Coordinators:** Mr. Anil Kadadi

Student Feedback: Students found the visit highly educational and motivating. It provided practical exposure to industrial processes and emphasized the importance of teamwork, discipline, and quality management in a real-world setup.

Faculty Coordinator: Prof. Shobhana

Student Coordinators: Vismaya

The industrial visit was a valuable learning experience that enhanced the students' understanding of the practical aspects of their curriculum and encouraged them to explore career paths in manufacturing and food industries.



KHO KHO Match for Girls

The Department of Electronics and Communication Engineering, FETW, SUK successfully organized a spirited **Kho-Kho Match for Girls** on **22nd April 2024**, encouraging active participation, team spirit, and physical fitness among female students.

Event Format:

The match was held on the college sports ground in a knockout format. Teams from different semesters competed against each other in a high-energy and well-coordinated sporting event. The matches were officiated by physical education staff and student volunteers.

Objective:

The event aimed to:

- Promote physical activity and wellness among girl students.
- Foster teamwork, discipline, and sportsmanship.
- Provide a break from academics and encourage extracurricular engagement.

Highlights:

- **No. of Teams:** 11
- **Format:** Knockout rounds leading to finals
- **Final Match:** ECE vs CSE
- **Winners:** ECE
- **Runners-up:** CSE
- **Audience:** Students and faculty members
- **Venue:** College Ground

Student Feedback: The event was highly energetic and well-received by participants and spectators alike. Students appreciated the opportunity to showcase their athletic talents and build camaraderie beyond the classroom.

Faculty Coordinator: Prof. Shobhana

Student Sports Coordinators: Reshma

The Kho-Kho match served as an excellent platform to boost confidence, promote fitness, and celebrate the sporting talent of the girls in the department.





Achievement



Our esteemed Dean, **Dr. Laksmi Maka**, is a visionary leader and a distinguished academician. With a wealth of experience and an unwavering commitment to excellence, she has played a pivotal role in shaping the university's academic and research landscape.

Recognized for outstanding achievements, ma'am has received numerous prestigious awards and honors, reflecting her dedication to innovation, education, and leadership. Under her guidance, the university has reached new heights in research, industry collaborations, and student development.

We take immense pride in having such an inspiring leader, whose contributions continue to motivate students and faculty alike.

➤ **Madam has been awarded several prestigious awards**

1. **Smt Triveni Devi Gupta Memorial by IETE in 2023**
2. **Sangameshwar Stri Prashasti-2023 by Tolasanhalli in 2023**
3. **Women of Inspiration by Sharnbasva University in 2023**
4. **Shayesta Akhtar Memorial National Award for the Best Women Engineering College Teacher by ISTE.**

➤ **Madam was the session chair for the IEEE conference at IEEE, ICWITE, 2024.**

Dr.Anuradha Patil,

Associate Professor, ECE, FETW, SUK.

Madam Has received NAIN project grant of 2Lakh for the project title “Arduino based smart system for women and child safety.



Laxmibai Biradar

Assistant Professor, ECE, FETW, SUK.

Madam Has received Best Paper Presenter Award in IEEE , ICIICS, 2023 conference Organized By shanrbasva University

Dr. Nagaveni K

Associate Professor, ECE, FETW, SUK.

Madam has published a patent titled A NOVEL MACHINE LEARNING AND DEEP LEARNING APPROACH TO PREDICT LIVER CIRRHOSIS

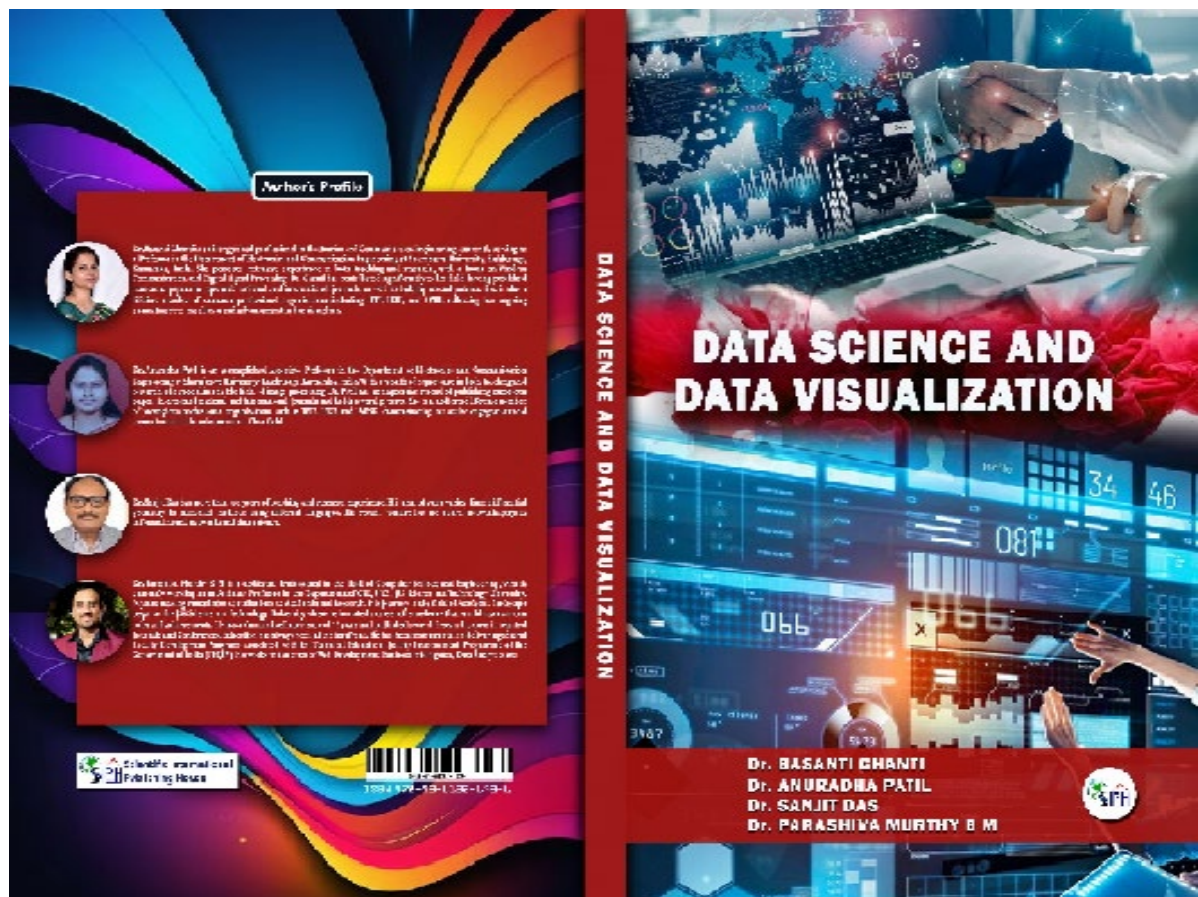


Dr. Sangeeta Patil

Assistant Professor, ECE, FETW, SUK.

Madam Has published a paper in Scopus indexed Journal “Early Stage Brain Tumor detection and Classification Using KSVM Algorithm In GUI Window”

Dr. Basanti and Dr.Anuradha has Published a Book named “Data Science and Data Visualization.



Akhila T Goled and Anjali batch 2021-25, have participated in District Science mela and secured first prize which was organized by Nehru Yuva Kendra, Youth Empowerment and Sports and District Science centre Kalaburgi.



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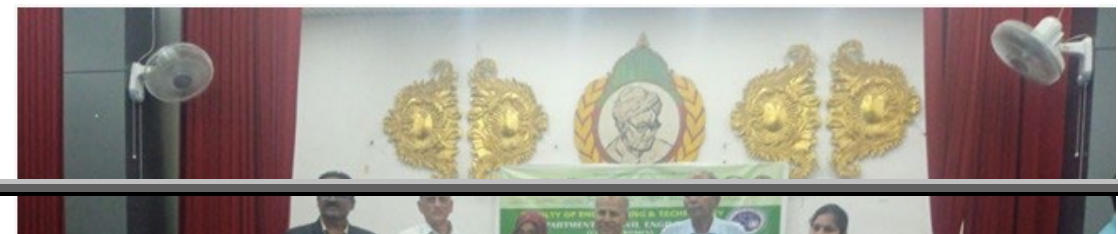
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Empowerment and Sports and District Science centre Kalaburgi.

Cricket team under the captaincy of Keertana , attained first prize in Inter Institute Sports Meet organized by sharnbasva University



Kho-Kho team headed by Reshma, attained first prize in Inter Institute Sports Meet organized by sharnbasva University.



Throw ball team headed by Aneesha , attained first prize in Inter Institute Sports Meet organized by sharnbasva University.



Arpita has received an appreciation for Videography ATC-II NCC Camp organized by 32 Karntaka Bn. NCC Kalaburagi



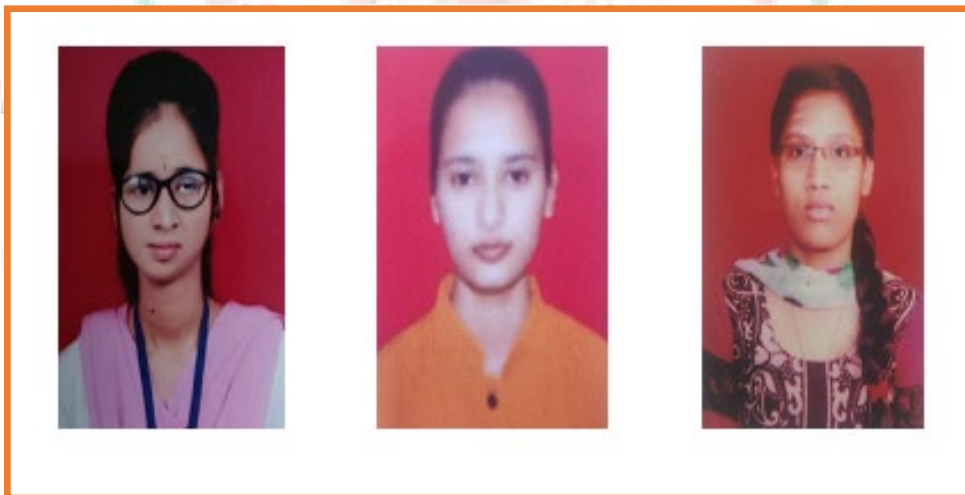
Shakti batch 2021-25, has received an appreciation for CATC/Inter Battalion TSC Camp Bagalkot organized by National Cadet Corps.



Akhila G Goled , batch 2021-25, has received an appreciation CATC-II GP PRE RDC -III, Torangallu, organized by National Cadet Corps.



Renuka, Bhagyashree, and Maheshwari participated in the **47th KSCST Project Exhibition** and were selected for the State Level Exhibition. Their project, “Expression-Based Emotion Detection Using Python,” guided by **Prof. Laxmi Patil and Prof. Shobhana**, won the **Best Project** of the Year Award. This prestigious recognition was conferred by the Karnataka State Council for Science and Technology (KSCST), along with a certificate and a **cash prize of ₹5000** for their outstanding innovation.



Rahat Shaik, Pooja, Sarika, and Shivani participated in the **47th KSCST Project Exhibition** and were selected for the State Level Exhibition. Their project, “**OTP-Based Bank Locker System Using Arduino with Biometric Alert,**” guided by **Prof. Basaweshwari and Prof. Neelambika**, won the **Best Project** of the Year Award under the esteemed recognition of the **Karnataka State Council for Science and Technology**.



Virtual Reality





Virtual Reality (VR) is a computer-generated environment with scenes and objects that appear to be real, making the user feel they are immersed in their surroundings. This environment is perceived through a device known as Virtual Reality Headset or helmet. It is also quite common to confuse the term Virtual Reality with Augmented Reality. The main difference between the two is that VR builds the world in which we immerse ourselves through a specific headset. It is fully immersive and everything we see is part of an environment artificially constructed through images, sounds, etc.

On the other hand, in Augmented Reality (AR) our own world becomes the framework within which objects, images or similar are placed. VR environments are primarily experienced through two of the five senses: sight and sound. This experience is delivered through VR headsets, which often include a screen in front of the eyes, and sometimes headphones. It does this by using special equipment that covers your eyes and sometimes your ears called VR Headset. Virtual Reality creates a believable, interactive 3D environment that you can explore and interact with, making you feel like you are really there. This is made possible by putting on a head-mounted display that sends a form of input tracking. The display is split between the eyes and thus creates a stereoscopic 3D effect with stereo sound to give you a graphic experience.

Engineering



foundation of modern civilization, driving innovation and progress. It spans multiple disciplines, including civil engineering. Civil engineers design infrastructure like bridges, machines and vehicles. Electrical engineers power systems, and computer engineers develop software and AI technologies. The digital revolutionized transportation, communication, and quality of life globally. It plays a crucial role in sustainable renewable energy and eco-friendly designs. Cybersecurity threats push engineers to develop smart

Engineering has revolutionized transportation, communication, and healthcare, improving quality of life globally. It plays a crucial role in sustainability, with advancements in renewable energy and eco-friendly designs. Challenges like climate change and cybersecurity threats push engineers to develop smarter solutions.

The future of engineering lies in AI, space exploration, and smart cities. As technology advances, engineers will continue shaping a more efficient, connected, and sustainable world. Their creativity and problem-solving skills make them the driving force behind human progress.

6G is the next-generation mobile communication technology, expected to launch around 2030. It promises ultra-high-speed data transfer, lower latency, and enhanced connectivity compared to 5G. With speeds up to 100 times faster than 5G, 6G will enable real-time holographic communication, immersive AR/VR experiences, and advanced AI integration.

This technology will support smart cities, autonomous vehicles, and the Internet of Everything (IoE), connecting billions of devices seamlessly. 6G will utilize terahertz (THz) frequencies, offering higher bandwidth and improved network efficiency. Energy-efficient and AI-driven, it will revolutionize industries like healthcare, automation, and space communication.



Despite its potential, challenges like infrastructure development and security concerns must be addressed. As research progresses, 6G will redefine global connectivity, making communication faster, smarter, and more efficient.

The Impact of AI Employment: Jobless or Job Creation





Ankita (Batch 2022-26)

The Job Replacement Narrative:

Critics often argue that AI will lead to massive job displacement, especially in routine and repetitive tasks. Automation has already made its mark in industries like manufacturing, where robots have taken over assembly lines. Similarly, the rise of AI-powered chat bots and virtual assistants has impacted customer service roles. As AI continues to advance, it is expected to replace certain jobs that involve predictable, rule-based tasks. However, history tells us that technological advancements, despite initial job displacements, often lead to the creation of new, more specialized roles. The key lies in adapting to these changes and acquiring the necessary skills to remain relevant in the evolving job market.

The Job Creation Perspective:

On the flip side, proponents of AI argue that it is a job creator, not just a destroyer. AI has the potential to enhance productivity and efficiency across industries, leading to the creation of new roles that require human intelligence, creativity, and emotional intelligence — areas where machines currently fall short. For instance, the development and maintenance of AI systems require skilled professionals in data science, machine learning, and artificial intelligence. As industries adopt AI, the demand for experts in these fields continues to rise. Moreover, AI can amplify human capabilities, enabling workers to focus on more complex and strategic tasks while leaving routine activities to machines.

Carbon Neutrality





Premalata (Batch 2022-26)

In the face of escalating climate change, carbon neutrality stands as a beacon of hope for Sustainable future. Achieving carbon neutrality means balancing the carbon dioxide emitted into the atmosphere with an equivalent amount removed, paving the way to a zero-emission society. This is critical in limiting global warming to 1.5 C, as outlined by the Paris agreement. The blueprint for carbon neutrality involves three pillars: reducing emission, increasing renewable energy adoption, and carbon offsetting. Transitioning from fossil fuels to renewable energy sources such as wind, solar, and hydro is essential, innovations in green technology, energy-efficient practices, and circular economies further support this shift, additionally, reforestation, wetland restoration, and carbon capture technologies play a vital role in absorbing excess atmospheric CO₂.

Collaboration between governments, businesses, and individuals is paramount; policies like carbon pricing and green subsidies can incentivize change, while corporations can implement sustainable practices and invest in green solutions. Individuals, too, contribute by adopting energy-efficient habits and supporting eco-friendly products.

Carbon neutrality is more than an environmental goal-it is an ethical commitment to future generations. By acting decisively today, we can create a resilient, sustainable world for tomorrow.

The Future is Green: Pathways to a Sustainable World



Achieving a sustainable future requires innovation, policy shifts, and lifestyle changes.

1. Renewable Energy Revolution ⚡

Transitioning from fossil fuels to solar, wind, and hydro power is key. Governments are phasing out coal and investing in smart grids and energy storage for efficiency.

2. Sustainable Transportation

EVs, hydrogen cars, and improved public transport reduce emissions. Cities promote cycling, walking, and carpooling to cut carbon footprints.

3. Green Architecture & Urban Planning

Buildings cause 40% of CO₂ emissions. Smart cities with energy-efficient designs, green roofs, and urban forests improve air quality and biodiversity.

4. Circular Economy & Waste Reduction

Designing products for reuse, recycling, and minimal waste conserves resources. Companies are reducing plastic and adopting sustainable packaging.



The Road ahead a Rollercoaster Ride into the Future



The Future of Tech: Bend, Encrypt, and Accelerate

Imagine a world where your phone rolls up like a paratha, your transactions are hacker-proof, and your downloads finish before you decide what to watch. The future is here!

Flexible Electronics

Bendable gadgets are no longer sci-fi. With stretchable materials and organic semiconductors, flexible tech is set to reshape industries.

Did you know? Future Kindles might feel like real paper with flexible e-paper!

Quantum Cryptography

Cybersecurity's superhero—using quantum mechanics to create unbreakable encryption. *Quantum Internet:* Data teleportation instead of cables!

Terahertz Communications

Blazing-fast speeds for instant downloads and holographic calls.

Astonishing Fact: THz waves can detect a sugar cube in a box from 10 meters away!

Beyond speed and security, these innovations promise a smarter, safer, and more connected world. The future is flexing, encrypting, and surfing terahertz waves into our lives. Get ready for the ride!



Time Travelling



TIME TRAVEL: A VISIT INTO THE FUTURE AND PAST

Time travel was once pure science fiction, introduced to many through cartoons and stories. Today, it's a subject of serious scientific inquiry, explored by Albert Einstein, Ronald Mallett, and Amos Ori. While we aren't piloting DeLorean time machines yet, advancements in **Electronics and Communication Engineering (ECE)** play a crucial role in unlocking its mysteries.

Einstein's Theory of Relativity

- **Special Relativity:** Time dilation occurs at speeds near light, slowing time for fast-moving objects.
- **General Relativity:** Predicts black holes and wormholes as potential pathways for time travel.

The Role of ECE in Time Travel

- **Atomic Clocks:** Essential for measuring time dilation effects.
- **Signal Processing:** Helps analyze data from extreme environments like black holes.
- **Quantum Computing:** Simulates space-time scenarios and explores possible time travel pathways.
- **Challenges to Overcome** Near-light-speed travel demands immense energy beyond current capabilities.
- The **Grandfather Paradox** raises logical contradictions about altering the past.

Conclusion

Time travel remains a distant dream, but rapid advancements in **physics, mathematics, and engineering** may one day unlock its secrets. For ECE students, it offers an exciting frontier to explore relativity, quantum mechanics, and futuristic technologies!



Crafting perfect circuit: AI's role in Electronics



AI & Signal Processing: A Powerful Partnership

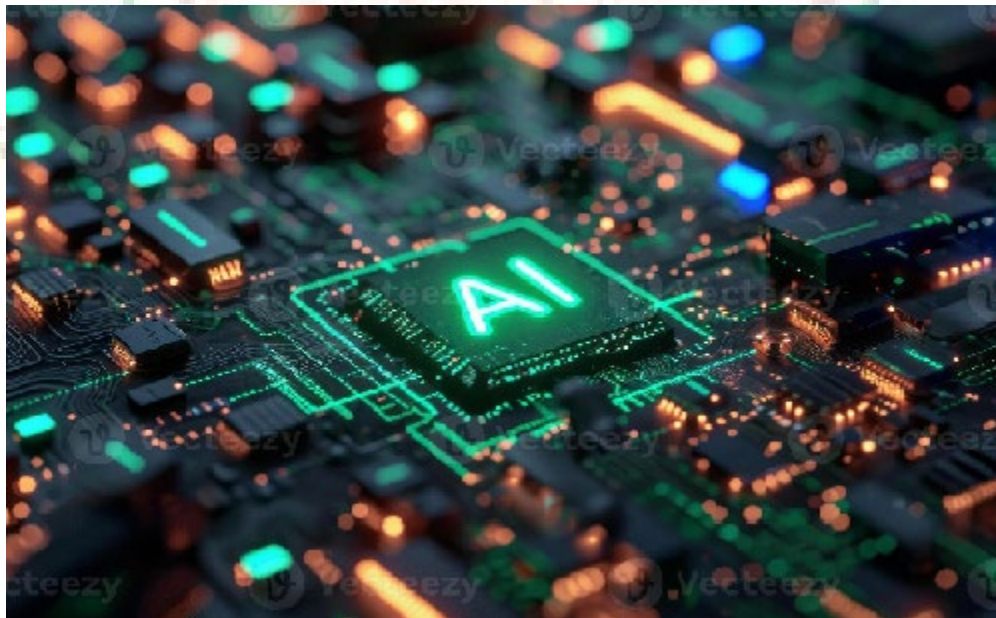
AI and signal processing are the ultimate dream team—one analyzes signals (images, sounds, data), while the other gives them intelligence. Together, they're making life smarter, safer, and even magical.

Transforming Industries

- **Healthcare:** Detecting diseases in medical scans faster than doctors.
- **Climate Science:** Tracking deforestation and predicting natural disasters.
- **Everyday Life:** Powering Alexa, facial recognition, and wearable health monitors.
- **Accessibility:** Enabling real-time captions for the hearing impaired and AI-driven navigation for the visually impaired.

Shaping the Future

Beyond convenience, this duo is reshaping how we connect with the world. From self-driving cars to personalized learning tools, the possibilities are endless. As AI evolves and signal processing advances, they're paving the way for a smarter, kinder future—where technology works seamlessly with us to improve lives.



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