The Spintronics News Letter

J. B. Institute of Engineering & Technology

June 2023 Volume 1, Issue01



Department of ECE

Vision:

To be a guiding force enabling multifarious applications in Electronics and Communications Engineering, promote innovative research in the latest technologies to meet societal needs.

Mission:

- To provide and strengthen core competencies among the students through expert training and industry interaction.
- To promote advanced designing and modeling skills to sustain technical development and lifelong learning.

INSIDE HIGHLIGHTS:



Dr. Towheed Sultana HOD, ECE Message from HOD

"I heartily Congratulate all the student, faculty and staff of ECE Department for successful activity and events, workshops etc in the department. I also congratulate IEEE Student Chapter for organizing workshop. And Especially the conducting of seminars is a great step for our Department". I thank the publication team of Newsletter.



Events Conducted:

- Workshop on Design Thinking, Critical thinking and Innovation Design
- Guest Lecture about "Image Processing and its Application"
- Session on Problem Solving and Ideation Workshop
- Women's Day Celebration
- J Bhaskar Rao Memorial 1st International Conference on Advanced Applications
 - of Technology and Management (AATM) 2023
- Guest Lecture about "Wearable Bio-Sensors"
- Three Days Workshop on "Printed Circuit Board"

Workshop on Design Thinking & Critical Thinking & Innovation



J. B. INSTITUTE OF ENGINEERING & TECHNOLOGY

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Bhaskar Nagar, Yenkapally Village, Moinabad Mandal, R.R. District, Hyderabad -500075



Department of Electronics & Communication Engineering

IEEE STUDENT CHAPTER

Workshop on

Design Thinking, Critical thinking, and Innovation

Resource Person Dr. Niraj Upadhayaya 11th January, 2023

Co Ordinators Dr Anindiya Jana Mr Shravan Kumar HOD Dr. Towheed Sultana Prinicipal
Dr. P C Krishnamachary

Details & Glimpse of Workshop

Dr. Niraj Upadhayaya, the senior professor, Dean R&D has covered the various aspects of design thinking, critical thinking and innovation ideas in detail. The ideas shared by Dr. Upadhayaya also includes some examples based on real time applications. Some of the points are described as follows.

- 1. **Design Thinking**: Design Thinking is a problem-solving methodology that prioritizes understanding user needs, generating creative solutions, and iterating through prototyping and testing. It's a human-cantered approach that emphasizes empathy for the end-user, collaboration among interdisciplinary teams, and iterative development. The typical stages of Design Thinking include empathize, define, ideate, prototype, and test. Design Thinking is widely used in various fields, including product design, service design, and organizational strategy.
- 2. **Critical Thinking**: Critical Thinking is the ability to analyze, evaluate, and synthesize information to make reasoned judgments or decisions. It involves actively questioning assumptions, considering multiple perspectives, and assessing the validity and relevance of evidence. Critical Thinkers are adept at identifying biases, logical fallacies, and

- inconsistencies in arguments. They can separate fact from opinion and make sound decisions based on evidence and logic. Critical Thinking is essential in problem-solving, decision-making, and forming well-informed opinions.
- 3. **Innovation**: Innovation refers to the process of creating new ideas, products, services, or processes that bring value to individuals, organizations, or society. It involves combining creativity with practical implementation to address challenges or seize opportunities. Innovation can occur through incremental improvements or radical breakthroughs and can manifest in various forms, such as technological advancements, business models, or social initiatives. Successful innovation often requires a combination of creativity, strategic thinking, collaboration, and a willingness to take risks.

While Design Thinking emphasizes empathy and creativity in problem-solving, Critical Thinking focuses on logical analysis and evaluation of information. Both are crucial for fostering innovation, which involves creating novel solutions that address real-world needs while also being feasible and valuable.

Dr. Niraj Upadhayaya, Delivering the Session





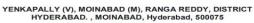






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Guest Lecture on Image Processing and its Application On 8th Feb 2023



Dr. Raj Kumar L Biradar Lecture

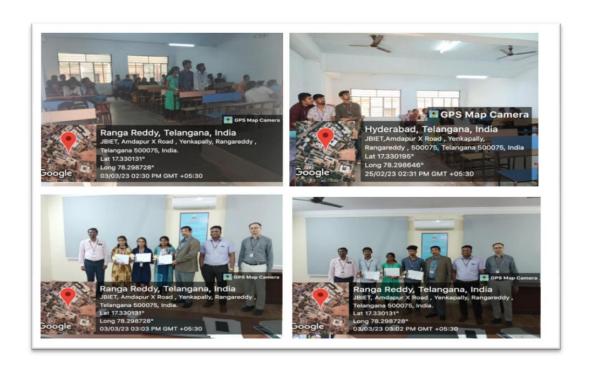
Dr. Raj Kumar has touched various scenario of Image processing and the applications starting from the standard definition to real time applications etc. as follows

Image processing is a field of study that involves manipulation and analysis of digital images to enhance their quality, extract useful information, or interpret their content. It finds applications in various domains, including medicine, entertainment, security, and more. Here are some common applications of image processing: medical Imaging, Remote sensing, Biometric, digital photography and video processing, Robotic Automation, security and

Problem solving and Ideation Workshop

surveillance.





Glimpse of women's day Celebration



In women's day
Dr. Sultana is
lighting the lamps



Women faculty with Students



Women Faculty Celebrating

AATM 2023

J Bhaskar Rao Memorial 1st International Conference on Advanced Applications of Technology and Management (AATM) 2023 was organized in JBIET, Hyderabad, Telangana, India on 10th March- 11th March, 2023.

AATM - 2023 is a multi-disciplinary, peer review international conference on recent trends in applications of engineering and management. The Aim of this conference is to provide a forum for the exchange of latest technical information, the dissemination of the quality research results, on field application, on set of new development area and the debate, also shaping of future directions based on artificial intelligence system development, modern communications, technology in health sector.

This conference was inaugurated by honorable chief guest Dr. T Raghu- Scientist (H), DRDO Hyderabad. A technical keynote speech was delivered by Dr. Kamol Waspinyokul from King Mongkut's Institute of Technology, Bangkok, Thailand.

AATM 2023 received about 214 articles by 481 authors. Out of this 116 papers by authors were accepted for presentation. After successful presentation, all presented papers were communicated to International Journal of System Design and Information Processing journal for publication. Around 50 participants from various industry and academia attended the conference.

We are obliged to our Honorable Secretary-JBES Shri J.V Krishna Rao Secretary, CEO-JBES Major Gen.Dr. S.S. Dasaka, Principal-JBIET Dr. P.C Krishnamachary, Dean R&D-JBIET Dr. Niraj Upadhayaya for providing full support and guidance to us in organizing this international conference AATM-2023.

The organiser thanks to all faculty members and staff in different sub committees for organizing the conference and make it a grand success.





3 Day Workshop PCB Design

FACULTY ACHIEVEMENTS:

"Our faculty members have actively participated in over 37 FDP's and workshops hosted by diverse institutions, demonstrating their dedication and continuous pursuit of knowledge."

STUDENTS ACHIEVEMENTS:

- Mr.Sabavath Rakesk Naik Certificate of merit in inter university mallakhamb tournament held at raja mahendra pratab singh university, Aligarh from 22.1.23 to 25.1 23.
- **Mr.T Nishanth** Participated and has achieved winners for volley ball in the Bhaskar Memorial Cup 2023 held at JBIET from 13th -17th March 2023.
- **Mr.Banthilal** Participated and has achieved winners for volley ball in the Bhaskar Memorial Cup 2023 held at JBIET from 13th -17th March 2023.
- **Mr.Vasanth** Completed Quiz Competition and Secured 1st place Conducted by Velammal College of Engineering and Technology, at Chennai .july 6 2023.

Patent

A System and Method for adjusting energy within a band gap Circuit by Dr. Towheed Sultana, Dr. Prasanta Kumar Pradhan, Mr N.Ramesh Babu, Mr Raj Kumar D Bhure, K. Snehalatha, Mr B Kishore Kumar ,202341073976 A/3010/23, Published / 22-12-2023

Research Project

- Rs 3,42,000/- was sanctioned by Manoeco to Dr.P K Pradhan for project titled Robotics for class room Teaching
- 2. DST Project for Rs 46,00,000/- for establishing Bio Electronics Laboratory was sanctioned PI- Dr. Anindya Jana CO-PI Dr. P K Pradhan, Dr.Towheed Sultana, Dr.Himanshu Sharma