
TECH ERA
STUDENT
TECHNICAL MAGAZINE
VOL-X
2024-25,issue II
Enter
Technical Support
Ctrl
DEPARTMENT OF IT (LBRCE)
VOL-X

CHIEF PATRONS

Shri. L. Bali Reddy, Founder Chairman (Late)

Shri.L. Jaya Prakash Reddy, Honarory Chairman

Shri L. R. N. K. Prasad Reddy, Chairman

PATRONS

Shri. G. Srinivasa Reddy, President, LBRCT

Dr. K. Apparao, Principal,

Dr. B.Ramesh Reddy, Vice-Principal

EDITOR-IN-CHIEF

Dr. B. Srinivasa Rao, Head & Professor, I T

EDITORS

Mrs. D. Vijay sri, Sr Assistant Professor

STUDENT COORDINATORS

Screening Committee

K. Sravya(22761A1236)
B .Manasa (22761A1204)
K. Sagar(22761A1234)

Editorial Board

M. Tejaswini(23761A12A4)
SK. Ismail Jabiulla (23761A12C4)

Drafting Committee

T. Hezyoni Nimshi(23761A12C6)
M. Rakesh(22761A1238)

FORE WORD

Department of Information Technology involves researching, designing, developing in current trends of computing systems. It gave me great satisfaction to know that department has come up with its own magazine, "Tech- Era". The way they presented it was unique, very creative and hope it will serve as a motivational and technological source for the students to exhibit their inherent talents and improve their skills. I would like to express my appreciation to whole team members of Tech-Era including faculty coordinators who really made it possible.

Dr. K. APPA RAO
PRINCIPAL

Congratulate the department of IT, LBRCE for bringing out the prestigious bi-annual magazine, Tech-Era. I am sure that the magazine will provide a platform for students and faculty members to expand their technical knowledge and sharpen their hidden literary talent and also strengthen all round development of the students. My congratulations to the editorial board who took the responsibility for the arduous task Dr. B. Srinivasa Rao most effectively.

Dr. B. Srinivasa Rao
Professor & HOD

DEPARTMENT OF INFORMATION TECHNOLOGY

VISION AND MISSION

DEPARTMENT VISION

To emerge as one of the most preferred departments for the budding engineers, aspiring to be successful IT professionals

DEPARTMENT MISSION

DM1: To impart quality education with a well-designed curriculum, consistent with industry requirements, that equips the student to face the career challenges.
DM2.: To extend the student's learning beyond the curriculum, through workshops on cutting edge technologies.
DM3: To strengthen creativity and team spirit of the students by providing a conducive environment, preparing them to face the challenges posed by the IT industry.
DM4: To develop life-long learning, ethics, moral values and spirit of service so as to contribute to society through technology**.**

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

Graduates of Information Technology programme will be:

PEO 1: Pursue a successful career in the area of Information Technology or its allied fields.

PEO2: Exhibit sound knowledge in the fundamentals of Information Technology and apply practical Experience with programming techniques to solve real world problems.

PEO3: Demonstrate self-learning, life-long learning and work in teams on

multidisciplinary projects.

PEO4: Understand the professional code of ethics and demonstrate ethical behavior, effective Communication and team work and leadership skills in their job

PROGRAM OUTCOMES (POs):

Graduates of Information Technology programme will have the ability to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modem engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for

sustainable development. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings

10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs):

Graduate of the Information Technology will have the ability to

PSO1: Organize, Analyze and Interpret the data to extract meaningful conclusions.

PSO2: Design, Implement and evaluate a computer-based system to meet desired needs.

PSO3: Develop IT application services with the help of different current engineering tools.

About the Department

The department of Information Technology was established in the year 1999 with an intake of 40 seats in UG program. Student intake is increased from 40 to 60 in the year of 2001, 120 students in the year 2019. It is the one of the most emerging

programmes in LBRCE. As IT plays a remarkable role in almost all sectors, due to this the need of Information Technology Engineers increased who could gain knowledge in recent technologies. Our department is intended to train the students in elementary courses and cutting-edge technologies like Cloud Computing, Android application, Big data, Digital marketing, Social networking and Digital communication for solving many social and business problems.

The department strives to be a centre for excellence, innovation and research with dedicated faculty, highly motivated students, state-of-the-art facilities and an innovative teaching-learning environment. The department was accredited by the National Board of Accreditation (NBA) for 3 years i.e 2008 and 2019 (Under Tier-I), valid up to Academic Year: 2021-22. The department has consistently demonstrated its potential for excellent research through sponsored research projects, consultancy work, high-quality scholarly publications, text books, open-source software and other professional contributions. Several research and consultancy projects are also underway as part of various MoUs with reputed industry and academic organizations. Our students have consistently achieved 100% placements and have demonstrated a high level of success in pursuing post graduates at top universities of the world as per QS World University Rankings, like Massachusetts Institute of Technology, Carnegie Mellon University, Yale, Columbia, Purdue and in the IITs & IIMs.

Our future Software Engineers, Entrepreneurs, and Researchers are encouraged with inventive approach. We have an excellent infrastructure and advanced labs to expedite our students. The department facilitates innovative practices such as student internships, mini and major projects to meet the requirements of employment, teaching-learning process and entrepreneurship. To upgrade the knowledge of students, department offers many tools and Software applications. The LBRCE-CSI students' chapter has been actively organizing events like Technical Seminars, Workshops and Guest lecturers.


STUDENT
ACHIEVEMENTS

Infosys conducted Finishing School on Employability

Month: January

Name Of Coordinators: Mrs. D. Vijay sree, Dept of IT.

Objective of the event: The objective of the program was to empower students from financially weaker backgrounds by providing them with industry-relevant skills, confidence, and career readiness, thereby improving their employability and future opportunities.

Description:

In January 2025, Infosys organized a Finishing School on Employability for students whose parents come from financially weaker backgrounds. The program focused on enhancing communication, aptitude, technical skills, problem-solving, and interview readiness.

Through interactive sessions, practical exercises, and mock interviews, trainers from Infosys guided students to build confidence, workplace adaptability, and professional skills. The initiative not only helped participants bridge the gap between academics and industry requirements but also created a pathway for them to pursue successful careers and financial independence.

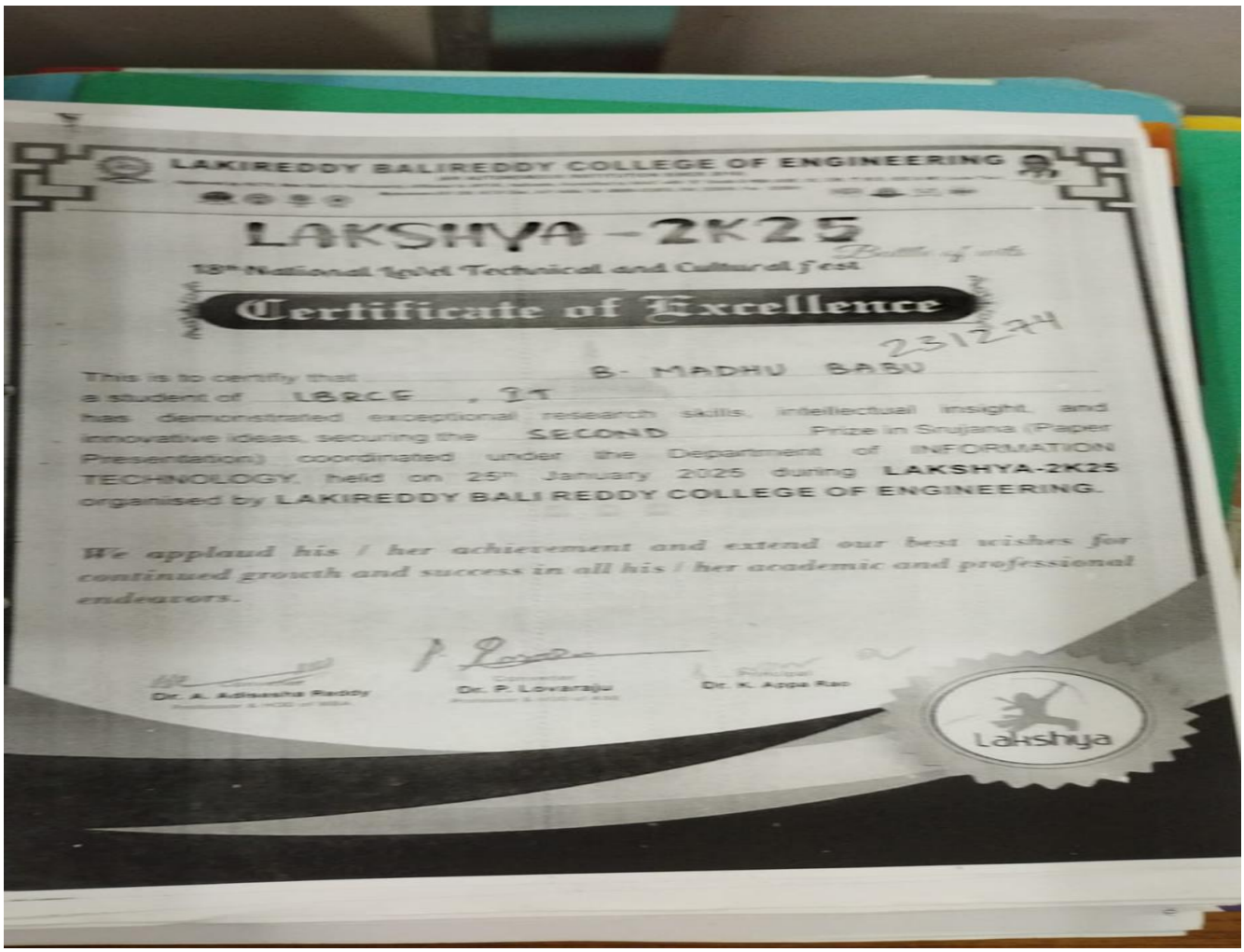
Innovative Minds Recognized

Month: January

Description:

Certificate of Excellence Awarded to B. Madhu Babu

Lakireddy Bali Reddy College of Engineering proudly presents this Certificate of Excellence to B. Madhu Babu, a student of LBRCF, 9T, in recognition of exceptional research skills, intellectual insight, and innovative ideas. B. Madhu Babu secured the **Second Prize** in the Srujana (Paper Presentation) event, organized by the Department of Information Technology, held on 26th January 2025 during the **LAKSHYA-2K25**, the 18th National Level Technical and Cultural Fest.



9 POINTS ABOVE CGPA ACADEMIC TOPPERS

Month: February

Description:

We are delighted to recognize the outstanding academic achievement of our IT Department's 2-year students who have attained a remarkable CGPA of above 9 points. This achievement exemplifies their dedication, academic excellence, and commitment to their studies.A select group of students from the IT Department have achieved a CGPA of above 9 points in their academic journey. This accomplishment not only reflects their scholarly abilities but also underscores their consistent effort and determination to excel in their chosen field of study.

Section Wise Toppers(above 9.0 SGPA)

S.NO	Section	Roll Num	Name Of the Student	SGPA
1	A	23761A1202	AKULA ASHOK KUMAR	9.29
2	A	23761A1226	KUNAPAREDDY LASYA SRI	9.29
3	A	23761A1243	RAVURI LAJWANTH V N P	9.14
4	A	23761A1215	DHADBANJAN SHREYA	9.00
5	A	23761A1254	SURAMSETTI PAVANI	9.00
6	B	23761A12D1	VEMULA S M SANKAR SAI LAKSHMI SREE RAM	9.71
7	B	23761A1297	KOTA HARSHA VARDHAN	9.43

Students Lead with Innovation

Month: March

Objective:

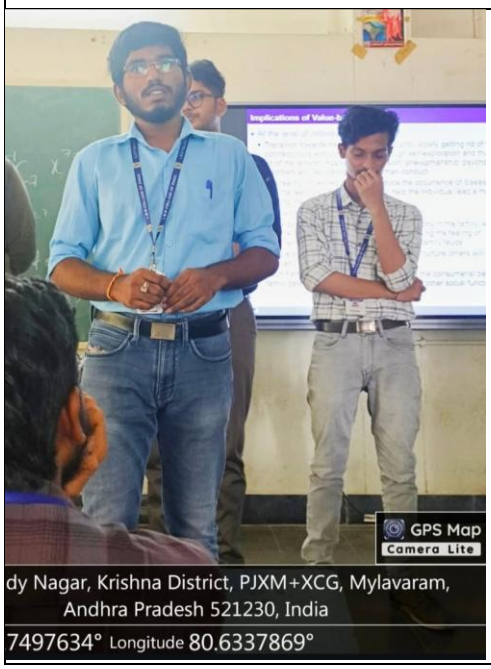
To encourage students to critically analyze existing systems, identify their limitations, and propose innovative, practical alternatives through research and presentation. The initiative aims to foster creative thinking, problem-solving skills, and a spirit of innovation, empowering students to become active contributors in shaping a better, more efficient future.

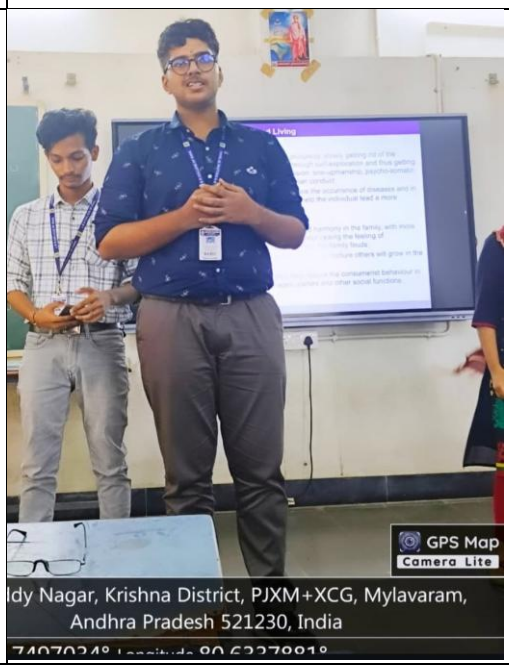
Description:

In a vibrant display of critical thinking and innovation, students took center stage to analyze prevailing systems and propose impactful alternatives. Through rigorous research and thoughtful presentation, they addressed key challenges in existing technological, educational, and societal frameworks, offering fresh perspectives and practical solutions.

The initiative provided a platform for students to go beyond academic theory and engage in real-world problem-solving. By questioning the status quo and designing improved models, participants demonstrated their ability to think independently, innovate responsibly, and communicate effectively.

Such engagements not only enhance technical and analytical skills but also foster a culture of inquiry and solution-oriented thinking. The event stands as a testament to the transformative power of student-led innovation, where young minds emerge as catalysts for change and contributors to a better future.





Mind Marathon: Unlocking Logic Through Mathematics and Aptitude

Month: April

Objective:

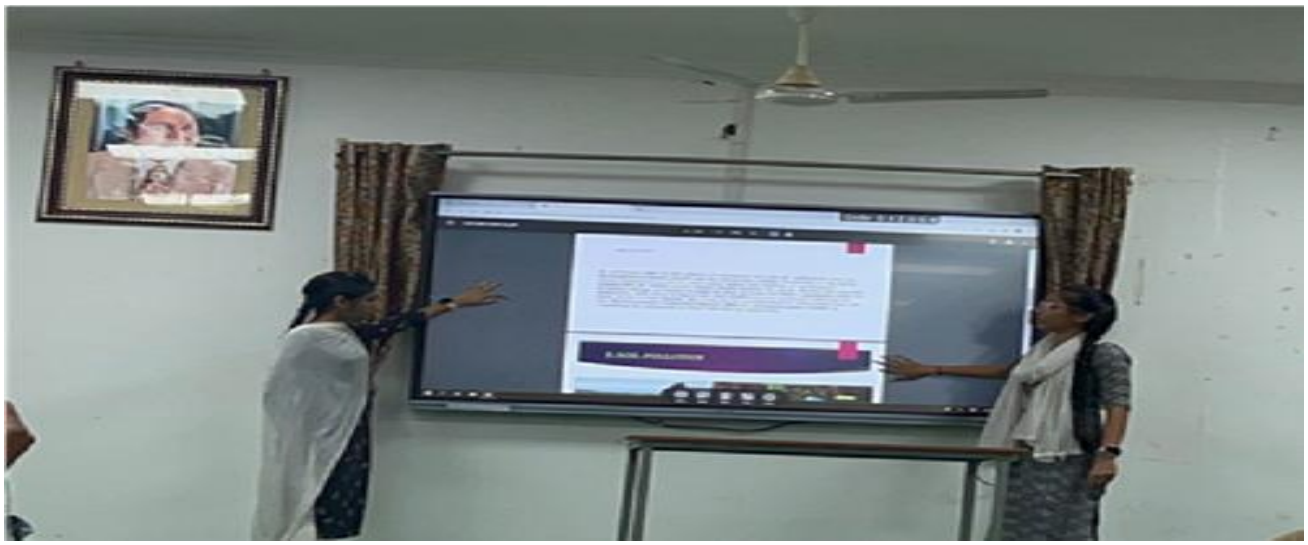
To enhance students' logical reasoning, numerical ability, and problem-solving skills through engaging mathematical and aptitude-based challenges, fostering critical thinking, time management, and analytical proficiency essential for academic and competitive success.

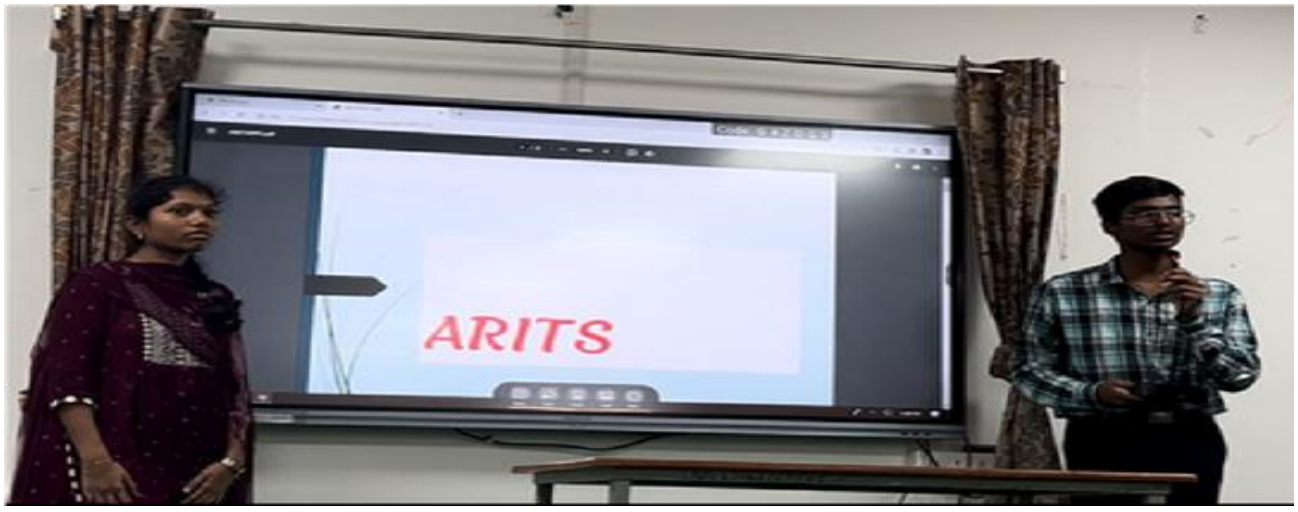
Description:

In an engaging and intellectually stimulating activity, students tested their problem-solving abilities through a series of mathematics and aptitude challenges. The event aimed to sharpen logical thinking, numerical reasoning, and analytical skills — essential tools for both academic excellence and competitive success.

Participants tackled a variety of tasks ranging from quantitative puzzles to real-life problem scenarios, all designed to push the boundaries of conventional thinking. The activity fostered a spirit of healthy competition, time management, and strategic reasoning among students.

By blending fun with mental rigor, the event not only made learning enjoyable but also encouraged students to view mathematics and aptitude as powerful tools for everyday problem-solving and decision-making.




ARITS

Empowering Insight: Generative AI for Data Visualization

Month: May

Objective:

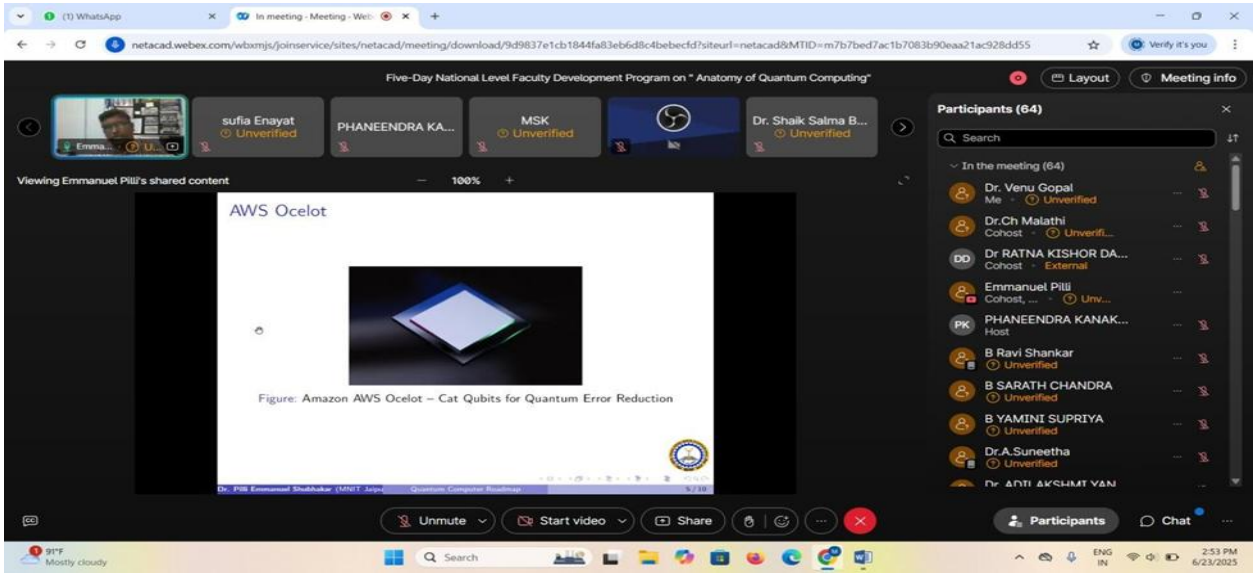
To equip faculty members, researchers, and professionals with comprehensive knowledge and practical skills in leveraging **Generative AI techniques** for **advanced data visualization**, enabling them to integrate cutting-edge AI tools into teaching, research, and real-world applications.

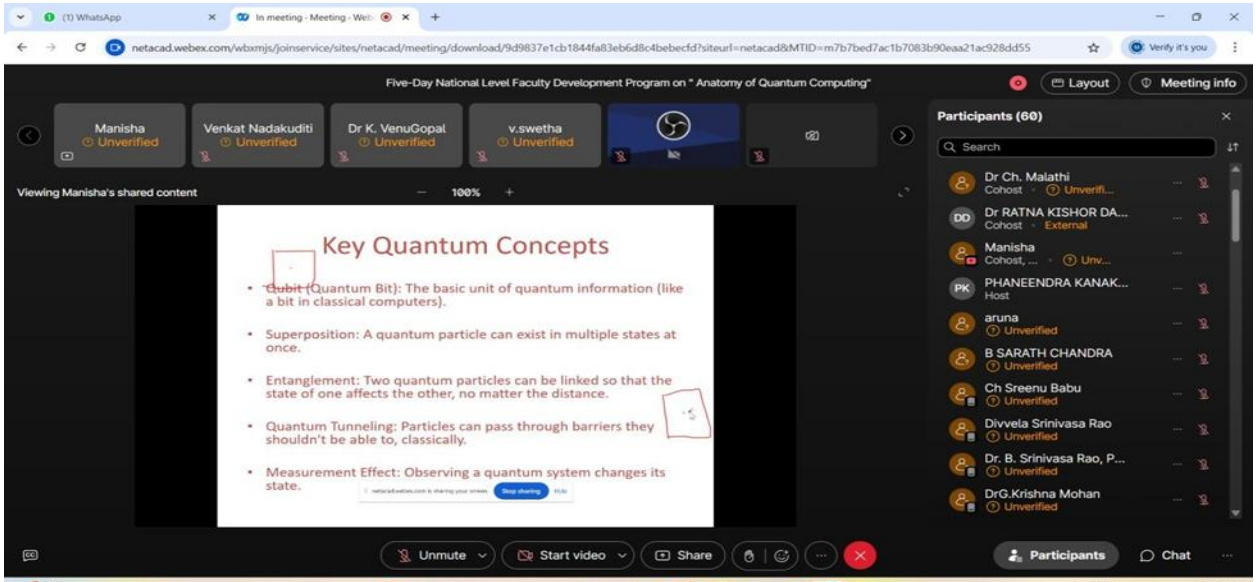
Description:

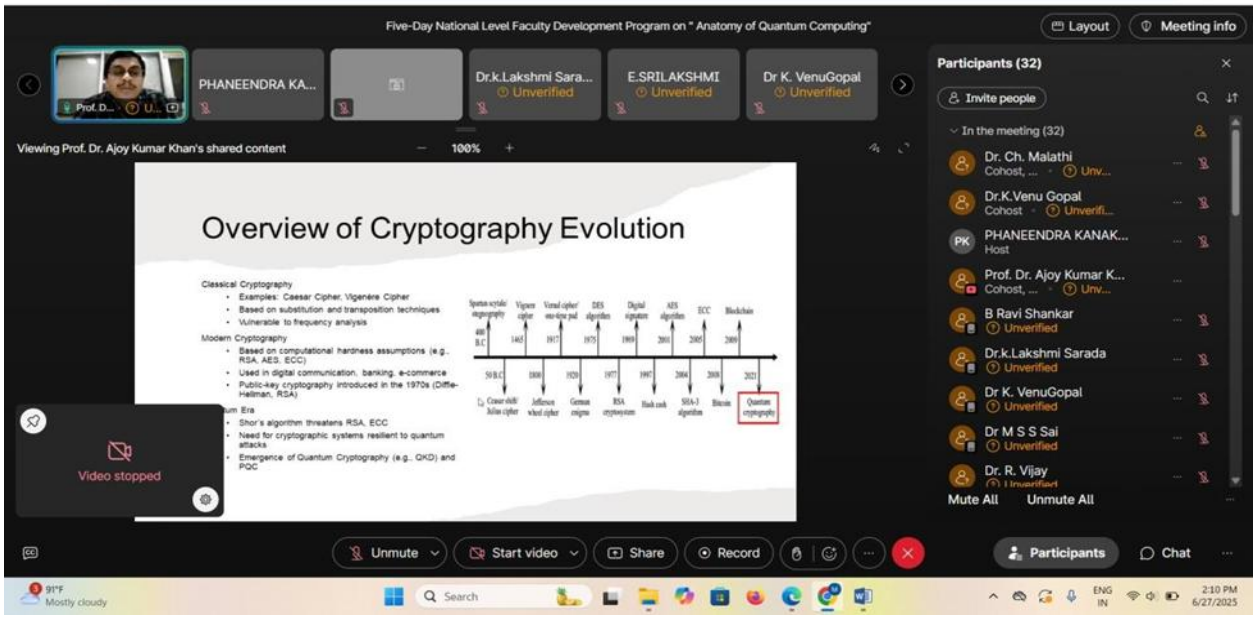
A six-day online **Faculty Development Programme (FDP)** on **"Generative AI for Data Visualization"** was organized with the aim of bridging the gap between traditional data analysis methods and emerging AI-driven visualization techniques. The FDP brought together experts from academia and industry to deliver in-depth sessions on topics such as:

- Fundamentals of Generative AI
- Applications of AI in visual storytelling
- Tools and frameworks like DALL·E, GANs, and AI-based dashboards
- Case studies and hands-on training in real-time data interpretation
- Ethical considerations and challenges in AI-generated visuals

Participants explored how generative models can transform raw data into meaningful, interactive visual content, enhancing insight-driven decision-making. The program emphasized **practical implementation**, encouraging participants to apply these tools in academic research, classroom instruction, and data-centric projects.


Five-Day National Level Faculty Development Program on " Anatomy of Quantum Computing"
Layout
Meeting info
sufia Enayat
Unverified
PHANEENDRA KA...
MSK
Unverified
Dr. Shaik Salma B...
Unverified
Viewing Emmanuel Pilli's shared content
100%
AWS Ocelot
Figure: Amazon AWS Ocelot – Cat Qubits for Quantum Error Reduction
Participants (64)
Search
In the meeting (64)
Dr. Venu Gopal
Me
Dr.Ch Malathi
Cohost
Dr RATNA KISHOR DA...
Cohost
External
Emmanuel Pilli
Cohost, ...
PHANEENDRA KANAK...
Host
B Ravi Shankar
B SARATH CHANDRA
B YAMINI SUPRIYA
Dr.A.Suneetha
Unmute
Start video
Share
Participants
Chat


Five-Day National Level Faculty Development Program on " Anatomy of Quantum Computing"
Layout
Meeting info
Manisha
Unverified
Venkat Nadakuditi
Dr K. VenuGopal
v.swetha
Viewing Manisha's shared content
100%
Key Quantum Concepts
Qubit (Quantum Bit): The basic unit of quantum information (like a bit in classical computers).
Superposition: A quantum particle can exist in multiple states at once.
Entanglement: Two quantum particles can be linked so that the state of one affects the other, no matter the distance.
Quantum Tunneling: Particles can pass through barriers they shouldn't be able to, classically.
Measurement Effect: Observing a quantum system changes its state.
Participants (60)
Search
Dr Ch. Malathi
Cohost
Dr RATNA KISHOR DA...
Cohost
External
Manisha
Cohost, ...
PHANEENDRA KANAK...
Host
aruna
Unverified
B SARATH CHANDRA
Unverified
Ch Sreenu Babu
Unverified
Divvela Srinivasa Rao
Unverified
Dr. B. Srinivasa Rao, P...
Unverified
DrG.Krishna Mohan
Unverified
Unmute
Start video
Share
Participants
Chat


Five-Day National Level Faculty Development Program on " Anatomy of Quantum Computing"
Layout
Meeting info
PHANEENDRA KA...
Dr.k.Lakshmi Sara...
Unverified
E.SRILAKSHMI
Unverified
Dr K. VenuGopal
Unverified
Viewing Prof. Dr. Ajoy Kumar Khan's shared content
100%
Overview of Cryptography Evolution
Classical Cryptography
Examples: Caesar Cipher, Vigenère Cipher
Based on substitution and transposition techniques
Vulnerable to frequency analysis
Modern Cryptography
Based on computational hardness assumptions (e.g., RSA, AES, ECC)
Used in digital communication, banking, e-commerce
Public-key cryptography introduced in the 1970s (Diffie-Hellman, RSA)
Era
Shor's algorithm threatens RSA, ECC
Need for cryptographic systems resilient to quantum attacks
Emergence of Quantum Cryptography (e.g., QKD) and PQC
Video stopped
Participants (32)
Invite people
Search
In the meeting (32)
Dr. Ch. Malathi
Cohost, ...
Dr.K.Venu Gopal
Cohost
PHANEENDRA KANAK...
Host
Prof. Dr. Ajoy Kumar K...
Cohost, ...
B Ravi Shankar
Unverified
Dr.k.Lakshmi Sarada
Unverified
Dr K. VenuGopal
Unverified
Dr M S S Sai
Unverified
Dr. R. Vijay
Unverified
Mute All
Unmute All
Unmute
Start video
Share
Record
Participants
Chat

AI Meets IoT: A Hands-on Workshop on Artificial Intelligence of Things (AIOT)

Objective:

To introduce participants to the emerging field of **Artificial Intelligence of Things (AIoT)** by combining the capabilities of **AI** and **IoT** for intelligent automation, real-time analytics, and smart systems development. The workshop aims to enhance practical understanding and foster innovation in AI-integrated IoT applications.

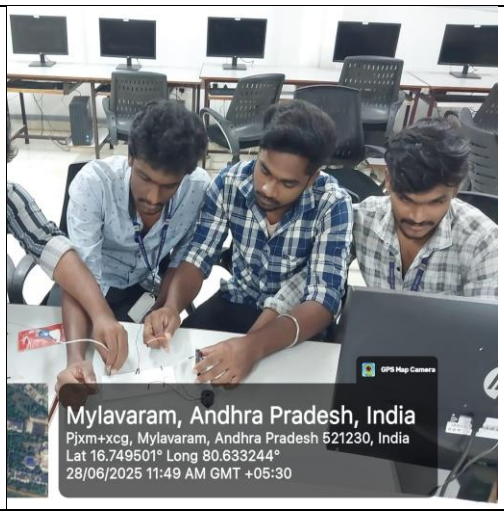
Description:

The **AIoT Workshop** provided a comprehensive overview of the convergence between **Artificial Intelligence (AI)** and the **Internet of Things (IoT)**, exploring how intelligent systems can process real-time data from connected devices to make autonomous decisions. Participants gained hands-on experience in:

- Building smart IoT prototypes with AI integration
- Using machine learning for sensor data analysis
- Developing real-time monitoring and control systems
- Understanding edge AI and cloud-based solutions
- Exploring AIoT applications in smart homes, healthcare, agriculture, and industry

The workshop blended theoretical insights with practical sessions, encouraging participants to develop innovative solutions for real-world problems using AIoT. By the end of the program, attendees were better equipped to design, implement, and scale intelligent systems using cutting-edge tools and technologies.


GPS Map Camera
Mylavaram, Andhra Pradesh, India
L.b.reddy Nagar, Krishna District, Pjxm+xcg,
Mylavaram, Andhra Pradesh 521230, India
Lat 16.749666° Long 80.633451°
28/06/2025 12:06 PM GMT +05:30


GPS Map Camera
Mylavaram, Andhra Pradesh, India
Pjxm+xcg, Mylavaram, Andhra Pradesh 521230, India
Lat 16.749501° Long 80.633244°
28/06/2025 11:49 AM GMT +05:30