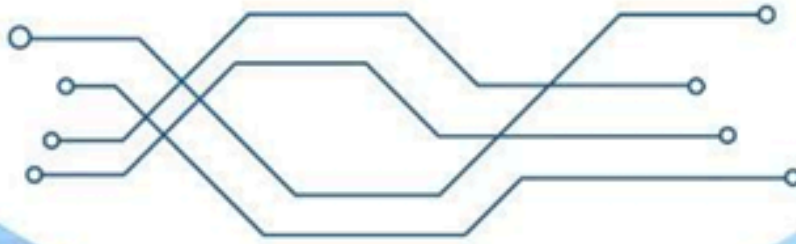




TekZine

2023-2024

Department of Information Technology
Jaipur Engineering College and Research Centre



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From the Desk



Shri Arpit Agarwal
(Vice Chairperson)

I am extremely privileged to lead the institute which has been an undisputed pioneer in the field of education and research, but also in a global arena.

We at JECRC continuously strive hard to reach the benchmark through the latest teaching tools, world-class training modules, and exploration of new research avenues to meet ever-changing corporate and education scenarios. One such feature added to the crown was the launch of "E-MAGAZINE" by the Information Technology department. All the students and faculties have perfectly groomed this magazine which depicts the confidence, creativity, and innovation of our gems. "E MAGAZINE" is a milestone that marks our growth, unfolds imagination, and gives life to our thought and aspirations, Information Technology department has done a cherished work that had its root in persuasion. The communication will also establish a trend of acquaintance with our alumni who are doing wonders across the world and raising the flag of JECRC higher and higher, for which JECRC owes a lot to them. Aristotle once said, "Educating the mind without educating the heart is so no education at all". I am overwhelmed by the team of hard-working staff and learned faculty who have made me proud by creating such a masterpiece in the form of a magazine. I once again congratulate the entire team for their hard work and dedication.

Best wishes and Happy Reading!!

From the Desk



Dr. V.K. Chandna
(Principal)

JECRC stands tall on the foundation of its excellence vision and mission being continuously achieved by its committed and deeply knowledgeable faculty and diverse student community that has a burning desire to make new paths of its own.

There is no longer a single pathway to that end but whatever paths our students choose must be filled with effort, dedication & relationships. "E-MAGAZINE" by the Information Technology Department of JECRC is indeed a great success giving out all the insights into the different activities in college as well as in the Information Technology Department.

This initiative was taken by the department will facilitate the students' necessary information, and record-keeping as well as increase student capabilities through active participation.

This magazine is the result of our creative & innovative team of students & faculties, we believe that engineering should be the experience of a lifetime. These experiences set the stage later in life and provide a lifetime of positive memories for our students.

May we continue to give our students strong roots like the Banyan tree and stronger wings to conquer the world!! I congratulate the team for their endless & sincere efforts in bringing out the publication & wish all readers an enriching journey through the pages of "E-MAGAZINE".
Happy reading!!

From the Desk



Dr. Smita Agrawal

Head Of Department (IT)

It gives me immense pleasure to lead the Department of Information Technology. Our college is one of the premier institutions, unique like a prism that reflects the manifold shades of learning and co-curricular activities.

With our issue of "E-MAGAZINE", we put forward a distinctive blend of offerings in the areas of engineering & technology in the form of different activities throughout the year.

The very motto of our department is to provide quality education. The process of learning is extremely important in life. What you learn, how you learn, and where you learn plays crucial roles in developing one's intellectual capability, besides career. Information Technology is a scene in today's world. We are committed to providing not only technical education to our students but also leadership qualities through which they can create employment for others.

I congratulate the Editorial Board for their tireless efforts in bringing out this publication. I also extend my sincere thanks to the persons who have contributed to the issue and enhanced its perfection & beautification through the article, poems, inspiring stories, etc. I wish all the students and faculty a great academic career.



Vision & Mission of College

Vision

To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

Mission

M1: Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.

M2: Identify areas of focus and provide platform to gain knowledge and solutions based on informed perception of Indian, regional and global needs.

M3: Offer opportunities for interaction between academia and industry.

M4: Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

Vision

To be recognized as Centre for providing outcome based education and prepare students to take challenges as per present technological scenario.

Mission

M1: Practice OBE for professional accomplishment of graduate attributes.

M2: Provide platform to gain knowledge and solutions as per social needs and requirement.

M3: Provide platform to enhance knowledge for interdisciplinary challenges and motivation towards achieving excellence.



Program Outcomes

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex electronics and communication engineering problems.

PO2: Problem analysis: Identify, formulate, research literature, and analyze complex electronics and communication engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions: Design solutions for complex electronics and communication 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.

PO4: 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.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: 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 electronics and communication engineering practice.



Program Outcomes

PO7: Environment and sustainability: Understand the impact of the professional electronics and communication engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the electronics and communication engineering practice.

PO9: Individual team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex electronics and communication 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.

PO11: Project management and finance: Demonstrate knowledge and understanding of the electronics and communication 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.

PO12: 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 Educational Objectives

PEO1: To strengthen students with fundamental knowledge of effective computing, problem-solving, and communication skills and enable them to have a successful career in Information Technology.

PEO2: To enable students in acquiring Information Technology's latest tools, technologies, and management principles to give them an ability to solve multidisciplinary engineering problems.

PEO3: To impact students with ethical values and commitment towards sustainable development in collaboration mode.

PEO4: To reinforce students with research and innovative approaches which help them to identify analyze, formulate and solve real-life problems and motivate them for lifelong learning.

PEO5: To empower students with leadership quality and team-building skills that prepare them for employment, and entrepreneurship, and to become competent professionals to serve societies and global needs.

Program Specific Outcome

PSO1: Ability to interpret and analyze network specific and cyber security issues, automation in real word environment.

PSO2: Ability to apply the knowledge of cloud computing, artificial intelligence, machine learning and deep learning under realistic constraints.



Department of Information
Technology

EVENTS

Session 2023-2024

30th September 2023

1-day Workshop
on
Unlocking the power of Java &
JavaScript

Organized By:
Department of Information Technology,
JECRC, Jaipur

Event Poster

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
DEPARTMENT OF INFORMATION TECHNOLOGY

PRESENTS

A HANDS-ON WORKSHOP
ON

**"Unlocking the Power of
Java & JavaScript"**



Mr. Yash Sharma, Web Developer
Cademate Training and Technical Services Pvt. Ltd.

-Date-
30.09.2023

-Venue-
C-501 [C-Block]

-Time-
12 Noon-3:00 PM

-CHIEF COORDINATOR-
DR. SMITA AGRAWAL
[HOD, IT]

-FACULTY COORDINATOR-
PIYUSH GAUTAM
[9414611785]

-FACULTY COORDINATOR-
ROHIT CHHABRA
[9667233924]

Event Details

Trainer Name : Yash Sharma Web Developer

Trainer Profile :

Having 5 Years of Experience teaching both front-end and back-end technologies. Hands-on approach with real world applications. Taken sessions for beginners and experienced professionals alike, creating an engaging learning environment. Empowering individuals and teams to excel in web development. **SKILLS**

❑ **Web development:** HTML5 , CSS 3.0 , Javascript with ES 6 , Bootstrap, React.Js , Node.js and Express, Databases , MongoDB , Django

❑ **Programming Languages :** Python , C, C++, java

❑ **Linux based operating systems :** Installing linux , Working with file system in linux , Linux user and group management

❑ Cloud environment

EXPERIENCE:

❑ Web Developer Cademate Training and Technical Services Pvt Ltd , Jaipur

PROJECTS:

❑ **Automobile engineering** Design and materials used in Formula one racing car

❑ **Self serving restaurant table** Design and build a electrical table that reduces efforts and time of staff of restaurant

WORKSHOPS & TRAININGS DELIVERED:

Delivered 10+ workshops & Training organized by Cademate Training and Technical Services Pvt Ltd and trained more than 1000+ students through Masterclasses and Workshop in the fields of web development at different Colleges and Universities like:

❑ **ARYA COLLEGE OF ENGINEERING**

❑ **JAIPUR NATIONAL UNIVERSITY , JAIPUR**

❑ **JECRC FOUNDATION, JAIPUR**

❑ **POORNIMA COLLEGE OF ENGINEERING, JAIPUR**

❑ **SKIT, JAIPUR**

❑ **JECRC UNIVERSITY , JAIPUR**

❑ **POORNIMA INSTITUTE OF ENGINEERING & TECHNOLOGY**

❑ **NIT , MIZORAM**

❑ **DR. KN MODI UNIVERSITY , RAJASTHAN**

❑ **GYAN VIHAR UNIVERSITY , JAIPUR**

Glimpses of Event



28TH NOVEMBER 2023

GITHUB WORKSHOP

Organized By:
Department of Information Technology,
JECRC, Jaipur

Event Poster



JAIPUR ENGINEERING COLLEGE AND
RESEARCH CENTRE



DEPARTMENT OF INFORMATION TECHNOLOGY
presents



GITHUB WORKSHOP



Mr. Tushar Goyal
Data Scientist @ **[REGEX]**

SPEAKER



Dr. Smita Agarwal
(Head Of Department)



Mr. Piyush Gautam
(Assistant Professor)



Ms. Kusum Yadav
(Assistant Professor)

📍 SEMINAR HALL C BLOCK

📅 28 NOVEMBER

🕒 8:30AM

Event Details

A workshop on GitHub can cover a wide range of topics depending on the participants' level of familiarity with version control, Git, and GitHub itself. Below is a general structure for a GitHub workshop, which can be adjusted based on the audience's experience level.

GitHub Workshop Outline:

1. Introduction to Version Control

- **What is version control?**
 - Explanation of version control systems (VCS) and why they are important.
 - Benefits of using version control (tracking changes, collaboration, etc.).
- **Difference between Local and Remote Repositories**
 - Local repositories (on your computer) vs. remote repositories (on GitHub, GitLab, etc.).

2. Setting Up Git & GitHub

- **Creating a GitHub Account**
 - Step-by-step guide to setting up a GitHub account if the participant doesn't have one.
- **Installing Git**
 - Installation guide for Git on different operating systems (Windows, macOS, Linux).
- **Configuring Git**
 - Basic configuration: `git config --global user.name "Your Name"` and `git config --global user.email "your.email@example.com"`.
- **Generating SSH keys (Optional)**
 - Benefits of using SSH for authentication with GitHub.
 - Generating SSH keys (`ssh-keygen`) and adding them to GitHub for secure communication.

3. Basic Git Workflow

- **Creating a Repository**
 - How to create a new Git repository both locally and on GitHub.
 - Using the GitHub UI to create a repository.
- **Cloning a Repository**
 - How to clone a repository from GitHub to your local machine using `git clone <repo-url>`.
- **Basic Git Commands**
 - `git init` — Initialize a new Git repository.
 - `git status` — Check the status of your repository.
 - `git add <file>` — Stage changes for commit.
 - `git commit -m "Your commit message"` — Commit changes to your local repository.
 - `git push` — Push local changes to GitHub.
 - `git pull` — Pull updates from GitHub to your local repository.
- **Making Changes and Committing**
 - How to edit files, stage them, and commit them.
 - Explanation of commit messages and best practices.

Event Details

4. Collaboration on GitHub

- **Forking a Repository**
 - What is forking, and how is it useful for collaboration? Demonstrating forking a repository.
- **Creating and Managing Branches**
 - How to create branches (`git branch <branch-name>` and `git checkout <branch-name>`).
 - Why branches are used in collaboration and feature development.
- **Pull Requests (PRs)**
 - How to create a pull request on GitHub.
 - How to review and merge pull requests.
 - Using GitHub's web interface to submit, review, and comment on pull requests.

5. Advanced GitHub Features

- **Issues and Projects**
 - Using GitHub Issues to track bugs or tasks.
 - Organizing work using GitHub Projects (Kanban board, milestones).
- **GitHub Actions (CI/CD)**
 - Introduction to GitHub Actions for Continuous Integration/Continuous Deployment (CI/CD).
 - Setting up a basic workflow for testing or deploying code.
- **GitHub Pages**
 - Hosting a website with GitHub Pages (especially useful for documentation or personal projects).

6. Best Practices for Version Control and GitHub Usage

- **Commit Message Guidelines**
 - Writing clear, concise, and useful commit messages.
 - Use of conventional commit formats (e.g., feat, fix, chore, etc.).
- **Keeping Your Branches Clean**
 - Merging branches frequently and keeping branches up-to-date.
 - Using `git rebase` for cleaner history (optional).
- **Code Reviews and Collaboration Etiquette**
 - How to conduct a code review on GitHub.
 - Guidelines for providing constructive feedback.

7. Troubleshooting Common Issues

- **Resolving Merge Conflicts**
 - How to resolve merge conflicts and avoid common pitfalls.
- **Reverting Changes**
 - How to undo local changes: `git reset`, `git checkout`.
 - How to undo commits (soft and hard resets).
- **Git Stash**
 - Using `git stash` to temporarily save changes and switch contexts.

Glimpses of Event



21ST FEBRUARY 2024

WORKSHOP ON HOW TO IDENTIFY PROJECT IDEA

Organized By:
Department of Information Technology,
JECRC, Jaipur



**DEPARTMENT OF
INFORMATION TECHNOLOGY**



HOW TO IDENTIFY IDEAS FOR YOUR NEXT PROJECT WORKSHOP

Are you stuck in a creative rut?
Discover practical strategies to
spark your imagination and
generate innovative ideas for your
next project.



Dr. Mukesh Agrawal
SPEAKER

**Date : 21 Feb
2024**

**Venue :
CT07**

- Discover where to find inspiration in everyday life.
- Learn how to visualize your thoughts and connect ideas.



Dr. Smita Agrawal
H.O.D.
I.T.



Sh. Arpit Agrawal
DIRECTOR
JECRC



Dr. V.K. Chandna
PRINCIPAL
JECRC

Event Details

Prof. Mukesh Agarwal is practicing Rajyoga Meditation since last 27 years. With a strong educational background and a profound understanding of meditation and spirituality, he has embarked on a journey to uplift individuals' lives through holistic learning and self-discovery.

Mukesh Agarwal holds a B. Tech. degree from MNIT, Jaipur and M. Tech. from BITS, Pilani.

He also holds a Master's degree in Value Education & Spirituality and Self Management & Crisis Management.

Currently serving as the Director of Training at Jaipur Engineering College & Research Centre (JECRC), Mukesh Agarwal has been instrumental in guiding students and faculty members alike towards a harmonious blend of Science and Spirituality. He leads the Spiritual Research Cell, a pioneering initiative within JECRC's premises, which acts as India's first Rajyoga Thought Laboratory. In this capacity, he mentors students on various dimensions of meditation and spirituality. He also guides students in developing techno-spiritual projects and value games. He has been awarded sponsorships from esteemed institutions like AICTE, DST Delhi, TEQIP III, and DST Rajasthan. These sponsorships have supported projects spanning Entrepreneurship Development Cell, Industry Institute Partnership Cell, MODROB, and a research endeavor exploring the relationship between meditation and cognitive science.

His passion for knowledge dissemination is evident in his engagements as a prolific speaker. He has delivered numerous lectures across the country, spreading insights on meditation, spirituality, and effective teaching methodologies. His wisdom has influenced diverse organizations and individuals seeking holistic growth.

He delivers talks on Study Techniques, Time Management, High Impact Teaching Skills, Meditation Techniques, Rajyoga Meditation Course, Philosophy of Karma, Understanding of Self, Stress Management, Spiritual Lifestyle and many more. Through his multidisciplinary approach, he bridges the gap between conventional education and spiritual well-being.

Glimpses of Event



13TH MARCH 2024

EXPERT TALK ON FULL STACK DEVELOPMENT

Organized By:
Department of Information Technology,
JECRC, Jaipur

Event Poster



Dept. of Information
Technology
JECRC JAIPUR

Expert Talk on Full Stack Development

About Full Stack Development

Full stack development involves creating both the front-end (user interface) and back-end (server-side) of a web application. Full stack developers work with HTML, CSS, JavaScript, and frameworks for the front-end, while managing databases, servers, and APIs for the back-end, enabling seamless communication between the user and database.



Abhay Sharma

Software Engineer at Wald.ai

As a SDE 1 at Kandle, I develop a fantasy crypto platform using NextJs and ReactJs, integrating web3 functionality, WebSocket functionality, and USDT payments. I also design an application architecture with centralized APIs and managed state using the Redux toolkit. I am passionate about creating innovative and user-friendly web applications using cutting-edge technologies and frameworks.



Date:
15th April 2024

Time:
11:30PM to 1:00PM

Venue:
CT 18

Connect with Us:

Ms. Deepika Bansal

Ms. Kusum Yadav

Faculty Coordinator (IT)

JECRC, Jaipur

Event Details

The session started at 11:30 am by welcoming the guest Mr. Abhay Sharma as a SDE 1 at Kandle, he develop a fantasy crypto platform using NextJS and ReactJs, integrating web3 functionality, WebSocket functionality, and USDT payments.

Full Stack Development refers to the development of both **front end** (client side) and **back end** (server side) portions of web applications. Full Stack web developers have the ability to design complete web applications and websites. They work on the frontend, backend, database, and debugging of web applications or websites.

Front-end Development

It is the visible part of website or web application which is responsible for user experience. The user directly interacts with the front end portion of the web application or website.

Back-end Technologies

It refers to the server-side development of web application or website with a primary focus on how the website works. It is responsible for managing the database through queries and APIs by client-side commands. This type of website mainly consists of three parts front end, back end, and database.

Glimpses of Event



13TH MARCH 2024

EXPERT TALK ON GENERATIVE AI

Organized By:
Department of Information Technology,
JECRC, Jaipur

Event Poster



Dept. of Information
Technology
JECRC JAIPUR

Expert talk on Generative AI

About Gen AI

Generative AI or generative artificial intelligence refers to the use of AI to create new content, like text, images, music, audio, and videos. Generative AI is powered by foundation models (large AI models) that can multi-task and perform out-of-the-box tasks, including summarization, Q&A, classification, and more.



Aishwary Goswami

AI Engineer at IntellifAI Labs Inc

As an AI Engineer at IntellifAI Labs, I focus on Generative AI, using deep learning tools like diffusers and PyTorch to create original content, including images, videos, music, and text. I develop algorithms for unique effects like motion and background replacement, voice editing, and AI-generated music and comics. My experience with large language models enhances our applications, which are tailored for audiences in the US and Canada, pushing the boundaries of AI creativity..



Date:

13th April 2024

Time:

11:30PM to 1:00PM

Venue:

CT 18

Connect with Us:

Ms. Deepika Bansal

Ms. Kusum Yadav

Faculty Coordinator (IT)

JECRC, Jaipur

Event Details

The session started at 11:30 am by welcoming the guest Mr. Aishwarya Goswami has role as an AI Engineer at IntellifAI Labs, specialize in Core Generative AI, a field within artificial intelligence focused on creating original content using deep learning and neural networks. Generative AI involves developing algorithms that can autonomously produce new data, such as images, videos, music, or text, based on patterns learned from existing data.

Specifically, he works on diffusers and PyTorch, which are libraries that help generate unique content in our applications. These include implementing motion effects and background replacement in images or videos, creating music and comic books using AI, and editing voice and speech.

Generative AI or generative artificial intelligence refers to the use of AI to create new content, like text, images, music, audio, and videos. Generative AI is powered by foundation models (large AI models) that can multi-task and perform out-of-the-box tasks, including summarization, Q&A, classification, and more.

Glimpses of Event



6TH - 7TH MAY 2024

6TH NATIONAL CONFERENCE
ON INFORMATION
TECHNOLOGY & SECURITY
APPLICATIONS
(NCITSA-2024)

Organized By:
Department of Information Technology,
JECRC, Jaipur

Event Poster



JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
DEPARTMENT OF INFORMATION TECHNOLOGY
PRESENTS
6TH NATIONAL CONFERENCE
ON
INFORMATION TECHNOLOGY
AND
SECURITY APPLICATIONS
MAY 6TH - 7TH, 2024

KEYNOTE SPEAKER



Mr. Gaurav Khetarpal
CEO
Vanshiv Technologies



Dr. R.K. Tiwari
Principal, RVS College of Engg. & Technology, Jamshedpur, Jharkhand

SESSION CHAIR



Dr. Rakhi Mutha
Associate Professor
Amity University Rajasthan



Dr. Mithlesh Arya
Associate Professor, CSE
SKIT, Jaipur

COMMITTEE



Sh. Arpit Agrawal
Vice Chairperson
Jecrc Foundation



Prof. V.K. Chandana
Principal
Jecrc Foundation



Dr. Smita Agrawal
HOD (IT), JECRC
CONVENER



Mr. Naveen Kedia
CONVENER



Ms. Deepika Bansal
CO-CONVENER

Event Details

The Department of Information Technology, JECRC, Jaipur, India is exultant to offer NCITSA-2024, a National Conference highlighting recent trends and development in science, engineering and technology in today's world.

Paper Submission

We invite researchers around the world to submit original, unpublished high quality research papers in the format as prescribed on the website

<https://easychair.org/conferences/?conf=ncitsa24>

The submissions are handled through the official conference email ncitsa@jecrc.ac.in

(Paper Submission Deadline 30TH April 2024)

Conference Theme

The scope of the conference includes the design and implementation of solutions and systems for research and advanced application-based tracks but not limited to Algorithms, Information Security, Soft Computing, Big Data & Cloud Computing, Database Technology, and Data Warehousing, Machine Learning, Video and Image Processing, and other Computer Application.

Conference Tracks

Track 1: Information Security

Track 2: Big Data

Track 3: Cloud Computing

Track 4: Soft Computing

Track 5: Virtual Communities and Social Networking

Track 6: Artificial Intelligence

Track 7: Computer applications

Track 8: Machine Learning, Modeling & Simulation

Event Details



Gaurav Kheterpal

BITS Pilani alumnus, founder and CEO of Vanhiv Technologies, a startup focused on building Salesforce, Google Cloud, and Generative AI applications.

Gaurav Kheterpal is a well-known thought leader in enterprise application development. He is a BITS Pilani alumnus with over 24 years of experience and is the founder and CEO of Vanhiv Technologies, a startup focused on building Salesforce, Google Cloud, and Generative AI applications.

Gaurav has presented at several leading international conferences across the US, Australia, UK, Singapore, Canada, and other countries. He has been recognized as a Salesforce MVP Hall of Fame inductee and is the only Indian among the 20 most influential leaders in the Salesforce ecosystem globally.

He is a well-known and recognized personality in the field of Education. He has devoted himself in this field with absolute dedication and probity since past 20 years. Not just being limited to technical supremacy, he effectively participates in mentoring and fulfilling his social responsibilities. Over the years, he has mentored a lot of successful Start-ups and Businesses and has been an advisory in judging board of various competitions. He has also guided a lot of students for technical expertise and has established himself as an educationist, mentor, and a think tank. All these combined may not fully describe his works and endeavours, though he continues to be a source of inspiration to many students.

Event Details



Dr. Mithlesh Arya

She is Professor in Department of Computer Science & Engineering, SKIT, Jaipur

Dr. Mithlesh Arya currently working as Associate Professor in Computer science and engineering Department at SKIT, Jaipur. She has more than 16 year teaching and research experience. She completed her PhD from MNIT Jaipur in 2020, Mtech from Banasthali Vidhyapeeth in 2010 and B.E from Engineering College Kota in 2004. Her Research Area are ML, image processing, pattern recognition. She published many papers in reputed journals and conferences.



Dr. Rakhi Mutha

Associate Professor at Amity Institute University Rajasthan

Dr. Rakhi Mutha is an Associate Professor at Amity Institute University Rajasthan, with over 15 years of teaching experience in computer science at both graduate and postgraduate levels in India and Muscat, Sultanate of Oman. Holding a Ph.D. and M.Tech. in Computer Science and Engineering, she is a prolific researcher with 35+ publications, including books, chapters, and papers in prestigious international journals and conferences. Dr. Mutha's innovative contributions extend to intellectual property rights, with 12 patents published under IPR India, 5 granted patents, 2 UK granted patents, and 2 Canadian copyrights. She is a certified ISTE Trainer for Internet of Things (IOT) and an IBM Certified Academic Associate for DB2. Her expertise is evident in her numerous expert lectures, technical session chairs, and board memberships in reputable international and Scopus-indexed journals. A member of professional societies like CSI, IAENG, and ISTE, Dr. Mutha's research interests encompass Blockchain, Artificial Intelligence, Internet of Things, Big Data, and Cybersecurity, making her a prominent figure in academia and industry.

Event Details



Dr. Rajesh K. Tiwari

Principal, RVS College of Engineering & Technology, Jamshedpur
Visiting Professor, Daffodil International University, Dhaka, Bangladesh
Advisor, Jharkhand University of Technology, Ranchi

Dr. Rajesh Kumar Tiwari, with over 22 years of experience in academia, industry, and research, is a respected scholar in data security, machine learning, cloud computing, and artificial intelligence. He earned his Ph.D. from Birla Institute of Technology, Mesra, Ranchi, specializing in data security, and completed postdoctoral work at IKUL, Malaysia. Dr. Tiwari's career is marked by his dedication to advancing educational pedagogy, developing curricula, and fostering strong industry-academia collaborations.

As a distinguished member of several technical societies, including IEEE, the Institution of Engineering and Technology (IET), and the International Data Science Association, Dr. Tiwari contributes to numerous committees under Kolhan University, Ranchi University, and Jharkhand University of Technology. His editorial positions include roles with the International Journal of Computer Engineering and Applications and Journal of Analysis and Computation, among others.

Dr. Tiwari is also actively involved in organizing conferences and has delivered keynote addresses at prominent institutions. He has authored over 65 research papers published in high-impact journals such as Elsevier, Springer, and Wiley. Notable research contributions include book chapters on topics ranging from Hindi text steganography to blockchain applications in cloud security and AI-driven healthcare analytics. His consultancy work includes network connectivity solutions for Hindalco Industries and ERP design for Vallabh Steel Ltd.

With an h-index of 17 and a citation count exceeding 610, Dr. Tiwari's work continues to influence the fields of data security and AI. His extensive experience and commitment to research make him an invaluable session chair, providing expertise and insights into emerging trends in technology and engineering.

Glimpses of Event



Glimpses of Event



7TH MAY 2024

QUANTUM COMPUTING: A NEW PARADIGM

Organized By:
Department of Information Technology,
JECRC, Jaipur

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER



DEPARTMENT OF INFORMATION TECHNOLOGY
IS ORGANISING
EXPERT TALK ON



QUANTUM COMPUTING:
A NEW PARADIGM

7 MAY 2024
12 AM

EXPERT
DR. R.K TIWARI

FACULTY COORDINATOR
RAMA BHARDWAJ
NIKITA GUPTA

HEAD OF DEPARTMENT
DR. SMITA AGARWAL

Event Details

Event Overview: The IT Department at JECRC college organized an expert talk on, Join us for an insightful session where top experts in QUANTUMCOMPUTING will discuss its latest trends, applications, and future prospects. This event will explore how quantumcomputing is revolutionizing various industries, from finance to healthcare, and its potential to drive innovation and efficiency.

Objectives:

The objectives of quantum computing are to leverage the unique properties of quantum mechanics to solve complex problems that are currently intractable for classical computers. Here are some key objectives:

- 1.Enhanced Computational Power:** Develop quantum computers that can perform calculations at unprecedented speeds, solving problems that would take classical computers thousands of years¹.
- 2. Optimization:** Improve algorithms for optimization problems in various fields like logistics, finance, and machine learning.
- 3. Cryptography:** Create new cryptographic techniques that are secure against quantum attacks, as well as develop quantum key distribution for ultra-secure communication²³.
- 4. Material Science:** Simulate and design new materials with desired properties by understanding their quantum behavior.
- 5. Drug Discovery:** Accelerate the discovery of new drugs by simulating molecular interactions at a quantum level.
- 6. Artificial Intelligence:** Enhance AI capabilities by enabling more complex and efficient data processing and pattern recognition.
- 7. Scientific Research:** Advance research in physics, chemistry, and other sciences by providing new tools for simulation and analysis.

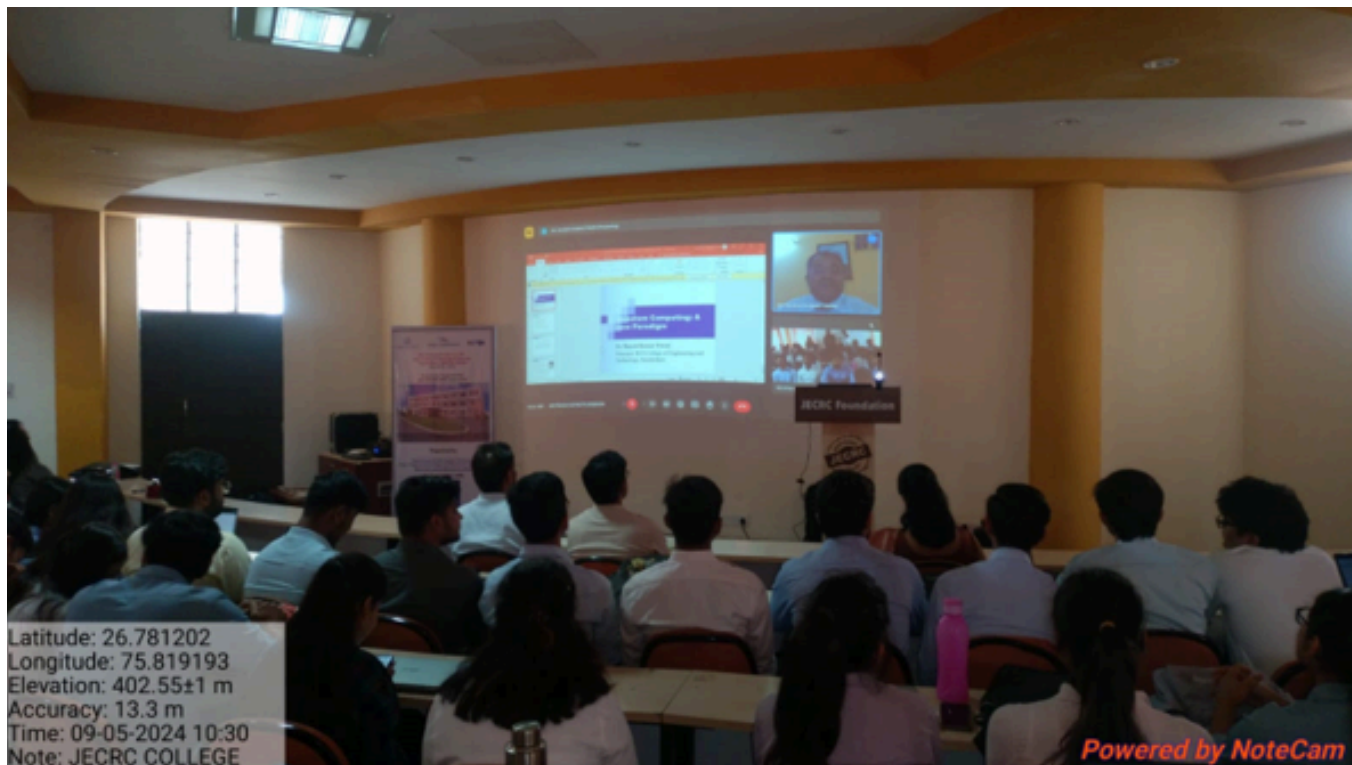
Highlights:

- **Introduction to Quantum Computing :** Understanding the basics and the underlying technology.
- **Current Trends:** Discussing the emerging trends and innovative applications of blockchain.
- **Case Studies:** Real-world examples of successful blockchain implementations.
- **Future Outlook:** Predictions and visions for the future of blockchain technology.
- **Q&A Session:** An interactive segment for participants to ask questions and engage with the experts.

Target Audience: The event was open to students from all years pursuing Computer Science or IT courses .

Promotion and Registration: Promotion was carried out through social media, class group announcements, and posters displayed around campus. Registration was done via an online form.

Glimpses of Event



9TH MAY 2024

BLOCK CHAIN TECHNOLOGY

Organized By:
Department of Information Technology,
JECRC, Jaipur

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER



DEPARTMENT OF INFORMATION TECHNOLOGY
IS ORGANISING
EXPERT TALK ON



**BLOCKCHAIN
TECHNOLOGY**

**9 MAY 2024
11 AM**

EXPERT
DR. RAKHI MUTHA

FACULTY COORDINATOR
RAMA BHARDWAJ

HEAD OF DEPARTMENT
DR. SMITA AGARWAL

Event Details

Event Overview: The IT Department at JECRC college organized An expert talk on , Join us for an insightful session where top experts in blockchain technology will discuss its latest trends, applications, and future prospects. This event will explore how blockchain is revolutionizing various industries, from finance to healthcare, and its potential to drive innovation and efficiency.

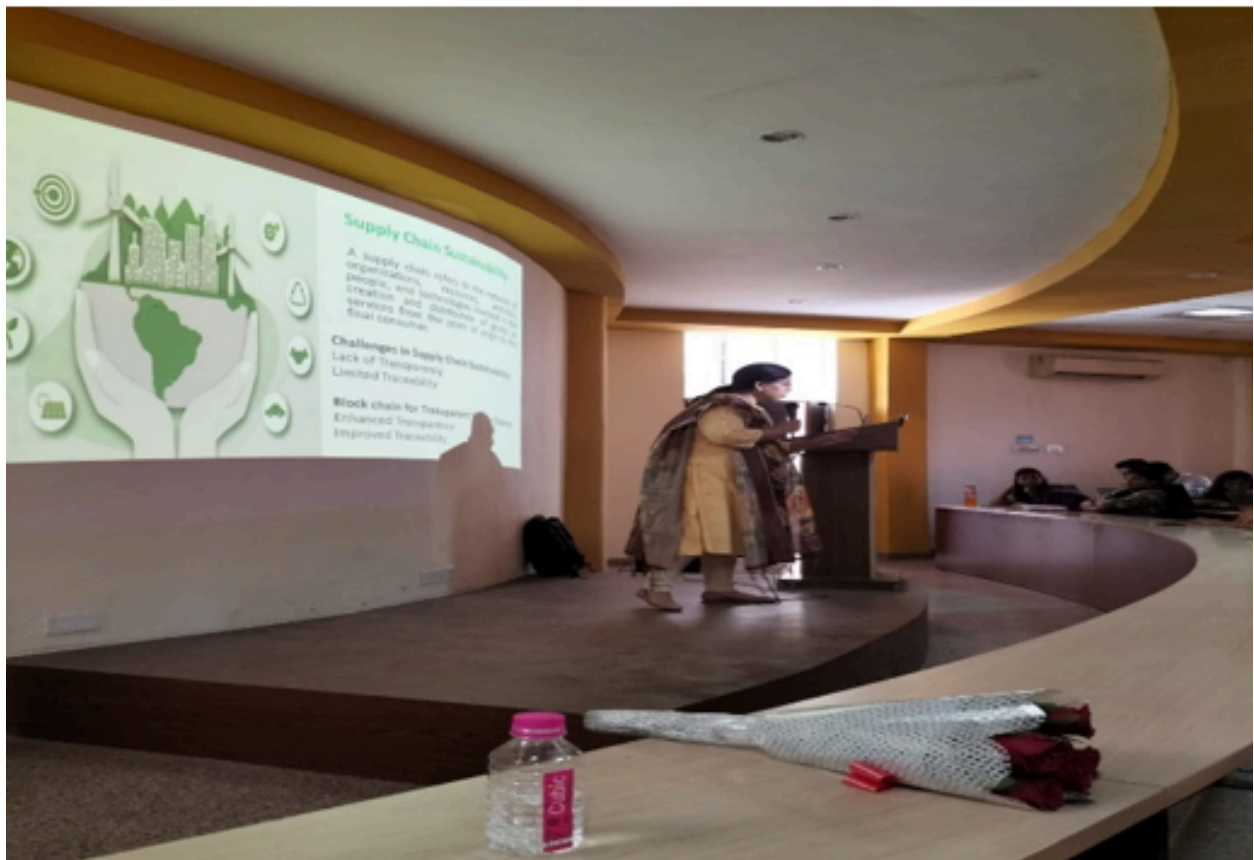
Objectives:

1. **Educate Attendees:** Provide a thorough understanding of blockchain technology, its core principles, and its architecture.
2. **Highlight Applications:** Showcase real-world applications of blockchain in various industries such as finance, healthcare, supply chain, and more.
3. **Discuss Trends:** Explore current and emerging trends in blockchain technology and their potential impact on different sectors.
4. **Address Challenges:** Identify and discuss the challenges and limitations associated with blockchain implementation, including scalability, security, and regulatory issues.
5. **Promote Innovation:** Encourage innovative thinking and explore future possibilities and advancements in blockchain technology.
6. **Interactive Learning:** Engage participants through interactive Q&A sessions, allowing them to clarify doubts and gain deeper insights.
7. **Networking Opportunities:** Facilitate networking among participants and experts, fostering collaboration and knowledge sharing.

Highlights:

- **Introduction to Blockchain:** Understanding the basics and the underlying technology.
- **Current Trends:** Discussing the emerging trends and innovative applications of blockchain.
- **Case Studies:** Real-world examples of successful blockchain implementations.
- **Future Outlook:** Predictions and visions for the future of blockchain technology.
- **Q&A Session:** An interactive segment for participants to ask questions and engage with the experts.

Glimpses of Event



20TH MAY 2024

NETWORKING WORKSHOPS

Organized By:
Department of Information Technology,
JECRC, Jaipur



Work Shop on “Networking”

ORGANISED BY IT DEPARTMENT ,
JECRC COLLEGE



Desigen/OPD/Desen/Culture/CST/24

CHALLENGE YOUR TECHNICAL KNOWLEDGE ON VARIETY OF
TOPICS !!!

JOIN US Networking !!

Date: 20 may 2024

Venue: CT-18

Time: 10:30 AM

Faculty Coordinate:

Mohd. Rizwan Khan

Event Details

Networking:-

Event Overview:

Department of Information Technology organized a workshop on Networking at JECRC college join us for making and how to implement or creations of a cable used to connect computer in a network and how to manage a network with using switches hub and routers.

Objectives:

The main objective of a Computer Network is to enable efficient communication and collaboration between users by sharing files, applications, and internet access. Networks can be small, like those in homes, or large and complex, like those in businesses or across the globe.

Hence, at a point it was decided to connect the computers in various departments to extract the information and correlate information about the entire company. The following are the objectives of the computer networks.

1. Resource sharing is the main objective of the computer network. The goal is to provide all the program, data and hardware is available to everyone on the network without regard to the physical location of the resource and the users.
2. The second objective is to provide the high Reliability. It is achieved by replicating the files on two or more machines, so in case of unavailability (due to fail of hardware) the other copies can be used.
3. Computer organization has helped organization in saving money. This is due to the fact that the small computer has much better price to the performance ratio comparison than the large computer like mainframe. Mainframe computer are approximately ten times faster than the microcomputers, but they cost thousands times more. As a result of this imbalance, organization has preferred to install interconnected microcomputer connected to the mainframe computer.
4. Computer network have provided means to increase system performance as the work load increases (load balancing). In the days of mainframe when the system was full it was to replace with the other large mainframe computer, usually at an expensive rate not convenience for user.

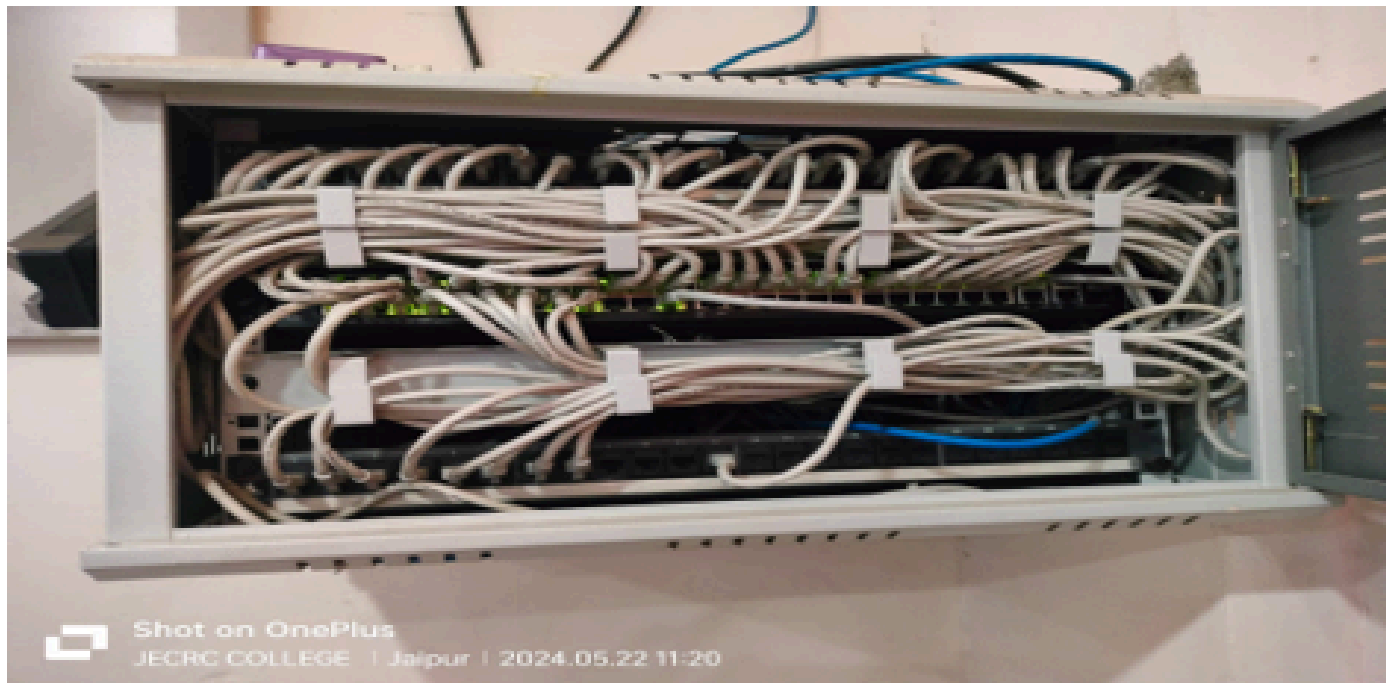
Target Audience: The event was open to students from all years pursuing Computer Science or IT courses.

Promotion and Registration: Promotion was carried out through social media, class group announcements, and posters displayed around campus. Registration was done via an online form.

Glimpses of Event



Glimpses of Event



DESIGN OF CROSS CABLE CAT-6



Work Shop on "Design Of Cross Cable CAT-6"

ORGANISED BY IT DEPARTMENT ,
JECRC COLLEGE



Design of cross cable CAT-6

CHALLENGE YOUR TECHNICAL KNOWLEDGE ON VARIETY OF
TOPICS !!!

JOIN US Design Of Cross Cable CAT-6 !!

Date: 22 may 2024
Venue: CT-18
Time: 10:30 AM

Faculty Coordinate:
Mohd. Rizwan Khan

Event Details

CAT-6 Cable Design:-

Event Overview:

Department of Information Technology organized a workshop on CAT-6 Cable Design at JECRC college join us for making and how to implement or creations of a cable used to connect computer in a network and how to manage a network with using switches hub and routers.

Objectives:

The Cat 6 Ethernet cable is designed to support data transfer speeds of up to 1 gigabit per second (Gbps) over a 100-meter run. This capability is paired with a bandwidth capacity of up to 250 megahertz (MHz), enabling smooth and efficient network performance for your high-demand applications.

Category 6 cable, also commonly known as network, LAN or Ethernet data cable, is a 4 twisted pair sheathed copper wire cable that can support data transfer rates of up to 1 gigabits (1,000 megabits). This higher bandwidth allows for quick transferral of large files in an office network.

It is compatible with fast Ethernet 10BASE-T, 100BASE-TX and Gigabit networks, and is backwards compatible with previous iterations, such as Cat5/5E and Cat3.

Either end usually has an eight-position eight connector (8P8C) RJ45 jack which is used to connect two devices together with the Cat6 cable. It's important to use jacks that meet the Cat6 rating in order to get the full performance it delivers.

As with all Ethernet cables, it can be identified by the labeling on the outer sheath.
Highlights:

Target Audience: The event was open to students from all years pursuing Computer Science or IT courses .

Promotion and Registration: Promotion was carried out through social media, class group announcements, and posters displayed around campus. Registration was done via an online form.

Glimpses of Event



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Faculty Members



Mr. Asha Ram Gurjar
Assistant Professor



Ms. Rama Bharadwaj
Assistant Professor

Team Members



Mitali Kandpal
II Year



Palak Goyal
II Year



Thank You



Department of Information Technology
JECRC Foundation



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