

The DataSphere logo consists of three overlapping circles in a light blue color, positioned to the left of the text 'DataSphere'.

DataSphere

Department of CSE- Data Science

MEERUT INSTITUTE OF ENGINEERING AND TECHNOLOGY
NH 58, Delhi-Roorkee Highway, Baghpat Bypass Road Crossing,
Meerut, Uttar Pradesh 250005

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Chairman's Message



Shri Vishnu Saran, B.E. (Mechanical), Chairman of MIET, has obtained his B.E. (Hons.) degree from NIT Kurukshetra and then served the state of Uttar Pradesh for over 37 years as Director of Boilers. He is a man with an extraordinary perception of a better tomorrow for each student who enters the premises of MIET through the provision of the best possible resources one could ask for. He is a visionary who is carrying on the dream philanthropic project nurtured by his father, the Founder-Chairman of MIET Group, the Late Sri CS Agarwal. He strongly believes and follows the four golden principles for success laid by the honorable Late Smt. Indira Gandhi ji – Foresight, Hard Work, Determination and Discipline.

The strength of MIET indeed lies in his grit & determination, the forceful support by his excellent subordinates, and the overall study orientation through multi-development policies that have distinctly made MIET a name brightening up in progression each year.

Mr. Shri Vishnu Saran
B.E. (Mechanical)

Meerut Institute of Engineering and Technology
NH 58, Delhi-Roorkee Highway, Baghat Bypass Road Crossing, Meerut,
Uttar Pradesh 250005

Vice Chairman's Message



Shri Puneet Agarwal, vice-chairman of the MIET Group of institutions, is a Civil Engineering graduate from one of the prestigious Institutes of Technology, BHU, now known as IIT, BHU. He has done his PGDM from the Indian Institute of Management, Ahmedabad. He holds a rich experience of 24 years with multinational, Indian corporates, PSU, and consultancy firms and also in diverse industries including Power and Power Equipment, Textiles, Retail, Education, and IT. The areas of his strong exposure consist of Sales & Marketing, Engineering Design, Operations, and Corporate Finance. He has shown unalloyed dedication to invigorating the educational progress of students. His vowed mission is to enlighten and vitalize the pedantic capabilities of young minds and widen the horizons of their thoughts and feelings in all three educational campuses of higher learning under the MIET Group namely:

- Meerut Institute of Engineering and Technology(MIET), Meerut, U.P.
- Meerut Institute of Technology(MIT), Meerut, U.P.
- MIET Kumaon Engineering College, Haldwani, Distt. Nainital, Uttarakhand

Established in the year 1997, the MIET Group has more than 60 acres of land spread across the three campuses encompassing good roads along with many huge trees, nice pedestrian walkways, gardens, etc. in Uttar Pradesh as well as Uttarakhand. Many technical courses are being delivered in all three campuses in affiliation with the state technical universities while non-technical courses have affiliation to the state universities respectively.

Under his leadership, MIET has got B++ accreditation under the latest guidelines of NAAC. Selected courses of MIET have also been accredited by the NBA and others are going in for accreditation after due diligence and immense planning. In academics, the institute has been ranked by reputed agencies in different independent surveys. To augment the delivery capabilities of the Faculty of the MIET Group, the Faculty members are being trained on the latest technologies. A concept of T3 "Train the Trainer" is being followed, where selected faculty members get trained, and then in turn they train other faculty members.

Shri Puneet Agarwal
B.E. (Civil Engineering)

Meerut Institute of Engineering and Technology
NH 58, Delhi-Roorkee Highway, Baghpat Bypass Road Crossing, Meerut,
Uttar Pradesh 250005

Director's Message



We, at MIET College strongly believe that the holistic development of students is possible by focusing on core areas which are Concept Based Learning and Comprehensive Industrial Exposure.

We offer 360-degree nurturing for overall grooming and developing global competency. We are committed to excellence through innovations in the teaching and learning process and have been successful in maintaining high academic standards by taking appropriate steps to bridge the gap between industry and academia.

With the advent of new technologies, it is the responsibility of the academic sector to be upgraded as per the needs of the industry. The requirements and expectations of the industrial sector need to be identified and the grooming of students ought to be done accordingly by the academic institution.

Our institution is highly motivated and putting up sincere efforts in this direction. We have developed several state-of-the-art labs, Centres of Excellence (CoE), and Advanced R&D Labs and have signed a good number of MoUs with different industries at the College and Departmental Levels. Centres of Excellence are corporate training centres for renowned industries.

The students are provided with a cohesive platform to work on live industry-based projects. We are also engaged in providing hands-on training in the core and IT sectors and are highly motivated to bring the best out of our students.

We feel privileged to have world-class infrastructure and meticulous faculty and staff members who are committed to providing comprehensive development of students to groom them into successful engineers and empathetic human beings at large.

Prof. (Dr.) S.K. Singh
(Campus Director)

Meerut Institute of Engineering and Technology
NH 58, Delhi-Roorkee Highway, Baghpat Bypass Road Crossing, Meerut,
Uttar Pradesh 250005

Hod Message



Welcome to the Department of Data Science at Meerut Institute of Engineering and Technology (MIET). In an era driven by data and rapid technological advancements, the field of Data Science stands at the forefront of innovation and impact. Our department is dedicated to cultivating analytical minds with strong foundations in statistics, machine learning, artificial intelligence, and domain-specific applications.

We take pride in offering a curriculum that is both academically rigorous and industry-relevant, supported by a team of highly qualified faculty and a culture of continuous learning. Our programs are designed to prepare students for dynamic careers in data analytics, research, and emerging technologies through a balance of theoretical knowledge and practical experience.

The department actively promotes interdisciplinary research, innovation, and collaboration with leading industries and research institutions. We encourage our students to take on real-world challenges through projects, internships, and hackathons, fostering a problem-solving mindset and ethical responsibility.

We sincerely invite aspiring students to join MIET and take the first step toward becoming tomorrow's data-driven leaders and innovators.

Mr. Krishan Kumar Sharma
Associate Professor
&
HOD CSE-Data Science)



Meerut Institute of Engineering and Technology
NH 58, Delhi-Roorkee Highway, Baghpat Bypass Road Crossing, Meerut,
Uttar Pradesh 250005

Editorial Desk



Welcome to the Department of Data Science at MIET, where data is not just a resource—it is a catalyst for innovation, insight, and transformation. As the editorial desk, we are proud to present this booklet as a reflection of our department's commitment to cultivating analytical thinkers and future-ready professionals.

Our curriculum is designed to bridge the gap between theory and application, integrating core domains such as machine learning, artificial intelligence, data security, and visualization. Through interdisciplinary projects, industry collaborations, and hands-on training, we empower students to tackle real-world challenges with precision and purpose.

This edition captures the essence of our academic journey—from rigorous coursework and research initiatives to student-led hackathons and industrial internships. It is a celebration of the data-driven mindset that defines our department and the collaborative spirit that propels us forward.

We invite readers to explore these pages with curiosity and pride, and to witness how MIET's Data Science community continues to shape the future—one dataset at a time

Ms. Shivani Pandey
Assistant Professor
(CSE-Data Science)

Editorial Team

1. Harshit Garg
(B.Tech CSE DS 4th Year)
2. Vedansh
(B.Tech CSE DS 3rd Year)
3. Varshit Tyagi
(B.Tech CSE DS 3rdYear)



About the Program



About the Program

Data Science is a dynamic and interdisciplinary field that deals with extracting knowledge and insights from structured and unstructured data using scientific methods, processes, and algorithms. The domain of Data Science integrates various aspects of computing, statistics, and machine learning. It has revolutionized decision-making and innovation across sectors, with rapid advancements taking place constantly. This evolving field is creating exciting opportunities in research, business, and industry. To stay updated and skilled in this area is a continuous challenge for data science professionals. Developing such professionals who can tackle this challenge and reach great heights is our vision. The department is supported by highly qualified faculty with M.E. / M.Tech. degrees who are proficient in both theoretical concepts and practical applications. The department offers a balanced mix of academic courses and hands-on projects that empower students to align with current trends in data-driven industries. We are committed to creating an atmosphere that allows students to develop their abilities to the fullest. This is enabled through expert faculty guidance, year-round organization of workshops, seminars, industrial interaction, and various co-curricular & extra-curricular events.

Vision

To become a leading department in the nation that imparts quality education in Data Science, aligned with rapidly evolving technologies; and to produce globally competent graduates who are capable of embracing new challenges in the field of Data Science and analytics.

Mission

1. To provide quality education in the fundamental and applied areas of Data Science, and nurture students from all socio-economic backgrounds into globally competent data professionals.
2. To instill professional ethics, social responsibility, moral values, and entrepreneurial abilities among students.
3. To enhance students' analytical and research skills, encouraging them to explore innovations and adopt lifelong learning in the evolving field of Data Science.

Program Educational Objectives

- **PEO1:** Pursue their career in the field of Data Science Engineering and allied industries.
- **PEO2:** Pursue their carrier in higher education in Data Science Engineering and other Professional Courses.
- **PEO3:** Demonstrate the leadership skills and communicate effectively.
- **PEO4:** Apply their concept in solving engineering problems within realistic constraints such as social, environmental, ethical, health and safety.
- **PEO5:** Pursue their career as entrepreneur in related or any other field.

Program Specific Outcomes

- **PSO1:** Ability to apply and interpret computational ideas in algorithms, machine learning, Data Science, Data Management, Data Security, and Visualization to construct intelligent prediction models
- **PSO2:** Ability to use learnt concepts and abilities to deliver a quality product by applying standard practices and procedures of analytics, statistics, and machine learning ideas in order to find solutions to real-world business issues.
- **PSO3:** Ability to apply fundamental principles and emerging technology to innovative research activities, career opportunities, and a desire to further higher education.



Placement Record

TOP Highest
Placement

3

Esha 7.6 LPA



Esha student of batch 2024 secured a stellar placement at Deloitte with a package of ₹7.6 LPA — an inspiring milestone for MIET's talent pool.

7.5 LPA **Ankit**

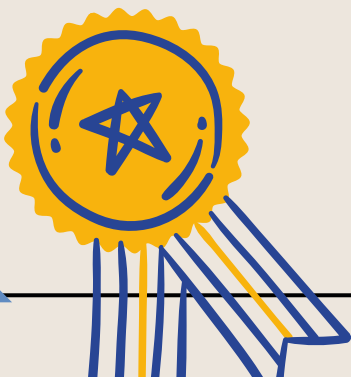
Ankit, from the 2024 batch, has achieved an exceptional placement at Talent Serve with a package of ₹7.5 LPA — marking a proud moment for MIET's growing legacy of excellence.



Divya Tyagi 7.43 LPA



Divya Tyagi from the 2024 batch has secured a stellar placement at Centilytics with a package of ₹7.42 LPA, adding pride to MIET's placement legacy.



Our TOP Recruiters

Deloitte

Centilytics

 **cognizant**

Lakshmi Kumaran
& Sridharan
ATTORNEYS

 **TalentServe**

wipro

freecharge
by  **AXIS BANK**

tcs **TATA**
CONSULTANCY
SERVICES


accenture

YHills
Learning Beyond Expectations

Activity Record

Project Expo 2024

S4DS MEERUT INSTITUTE OF ENGINEERING AND TECHNOLOGY **MIET**
DEPARTMENT OF CSE-DATA SCIENCE

PROJECT EXPO 2024

1. DataScience Project Displays
2. Interactive Sessions
3. Panel Discussion
4. Networking Opportunities

FACULTY COORDINATORS
MR. HEMANT BARANWAL
MR. AQIB AKHTAR ZIA

HEAD OF DEPARTMENT
MR. RICHIT AGGARWAL

3 JUNE 2024 **09:00 AM-5:00PM** **B4-105**

The Project Expo 2024 at Meerut Institute of Engineering and Technology (MIET) was a vibrant celebration of student innovation, technical ingenuity, and interdisciplinary collaboration. Organized by the S4DS Society and Department of Computer Science & Engineering – Data Science, the event showcased a diverse array of student-led projects spanning Artificial Intelligence, Power BI, and Data Science, each addressing real-world challenges with creative and impactful solutions.



Events & Programs



SIDS **MIET**

LETS TALK ABOUT Web3!!

Join Rise In's Web3 session to explore decentralized tech, career opportunities, and the future of Web3 with expert insights !!!

TUESDAY
24 SEPTEMBER

TIME
02:00 P.M.

AUDI - 4

REGISTER NOW!

SPEAKER



Mr. Sahitya Roy
(Developer Relations Specialist at Rise In)

Conveners:
Mr. Rohit Aggarwal
Prof. & Head (CSE Data Science)
Ms. Shivani Rohilla
Prof. & Head (CS)

Coordinators:
Mr. Aqib Akhtar Zia (Faculty Coordinator)
Ms. Shivani Pandey (Faculty Coordinator)
Suryansh Patwal (Student Coordinator)

The S4DS Society of B.Tech CSE—Data Science at MIET organized a forward-looking Web3 seminar focused on blockchain technologies, featuring Sahitya Roy as the keynote speaker—a well-known Developer Community Specialist and advocate for open-source and hackathons



Events & Programs

The Analyst's Blueprint

SDS TECHNICAL CLUB

DEPARTMENT OF CSE-Data Science

PRESENTS

AN EXCLUSIVE SEMINAR ON

THE ANALYST'S BLUEPRINT

From Study hall To Data hall

- INTRODUCTION TO DATA ANALYSIS
- FREE COURSE AND RESOURCES
- INTERVIEW EXPERIENCE
- ON CAMPUS PREPARATIONS
- AND MUCH MORE.....

17 MAY 2024
3:10 ONWARDS
AUDI 5

REGISTER NOW!!

QR CODE

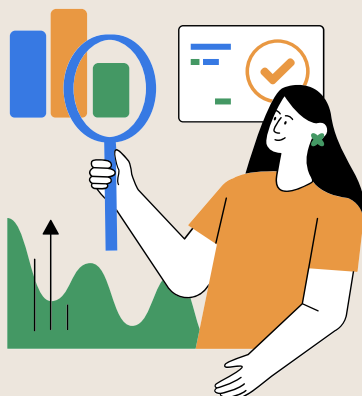
SPEAKER
ESHA MOHAN
DATA ANALYST AT DELOITTE

STUDENT COORDINATORS:
CHIRAN K. S. (2022BBA)
ANISHA S. (2022BBA)

CONVENOR:
PROF. DR. ANURAG SAXENA
(DEPARTMENT OF CSE)

CO-CONVENOR:
DR. SUDHAKAR S. (2022BBA)
DR. SUDHAKAR S. (2022BBA)

The Analyst's Blueprint: From Study Hall to Data Hall was an engaging seminar hosted by the Department of CSE–Data Science and SDS Technical Club at MIET College on 17 May 2024. Featuring Esha Mohan, Data Analyst at Deloitte, the session offered practical insights into data analysis, interview experiences, and campus preparation strategies. Attendees gained access to free resources and real-world guidance for launching careers in analytics. The event empowered aspiring analysts with both inspiration and actionable knowledge.



Events & Programs

Shabd Shakti

DEPARTMENT OF CSE- DATA SCIENCE

शब्द Shakti

*"Where Language Meets Innovation:
Celebrating Hindi Divas And Engineers Day"*

REGISTRATION FOR PARTICIPANTS

- Dance
- Poetry
- Singing

13 SEPTEMBER 2024

3 PM ONWARDS

**AUDI 6
RAMAN BLOCK**

REGISTRATION FOR AUDIENCE

Student Coordinator:
Suryansh Patwal : (8057296589)
Deepanshu Bhargav : (9105627848)

Convenor:
Dr. Ankur Saxena
(Dean CSE, IT & Allied Branches)
Mr. Rohit Aggarwal (HoD-DataScience)

Faculty Coordinator:
Mr. Aqib Akhtar Zia
Ms. Poojvi Sharma

social media icons: [s4ds_miet](#), [s4ds_miet](#), [s4ds](#), [s4ds_miet](#)

Shabd Shakti, a vibrant cultural activity organized by ACIC MIET in collaboration with the S4DS Society of B.Tech CSE–Data Science, celebrated on 13th September 2024 to enrich creativity through captivating events like dance, singing, and poetry,



Events & Programs

Data Science Club, MIET College, Meerut
In collaboration with
Environment Club
Discipline Club
"Growth & Resilience"
प्रकृति की बात नारी के साथ
#Women4Nature

INVITED GUEST SPEAKERS :

- Monika Saini**
VanRakshak
Forest Dept. Meerut
- Ratna Singh**
Climate Activist, Varanasi
- Roena Chaudhary**
VanRakshak
Forest Dept. Meerut

Panel Discussion on "Women and Eco Campaigns" :

- Vidhi Kaushik**
Awardee by
Nagar Nigam Meerut
- Ritika Yadav**
Senior Volunteer of
Environment Club
- Ishika Batra**
"Maha Yuga" 2024
Campaign Coordinator

Date : 09 March 2024
Saturday

Location : MIET College, Bypass, NH-58, Meerut.

Timings : From 11 am onwards.

“प्रकृति की बात नारी के साथ” was a powerful and inspiring event organized by the Data Science Club, in collaboration with the Environment Club and Discipline Club of MIET College, Meerut. Held on 09 March 2024, the event celebrated the vital role of women in environmental advocacy and sustainable development.

The SecureTech Symposium, hosted by MIET's CSE–Data Science Department, featured expert insights from Ms. Madhuri Dewangan on cybersecurity, automation, and AI. Held on 18 May 2024, the webinar empowered students with cutting-edge knowledge in digital defense and smart technologies.

SIDS Technical Club
DEPARTMENT OF CSE-DATA SCIENCE

Presents
an Exclusive Webinar on

SecureTech Symposium:
"Safeguarding networks, use of Automation and impact of AI"

Ms. Madhuri Dewangan
Security Automation Consultant
@Pactima, Ex-CISCO

Google Meet
18 May 2024
11 AM onwards

REGISTER NOW

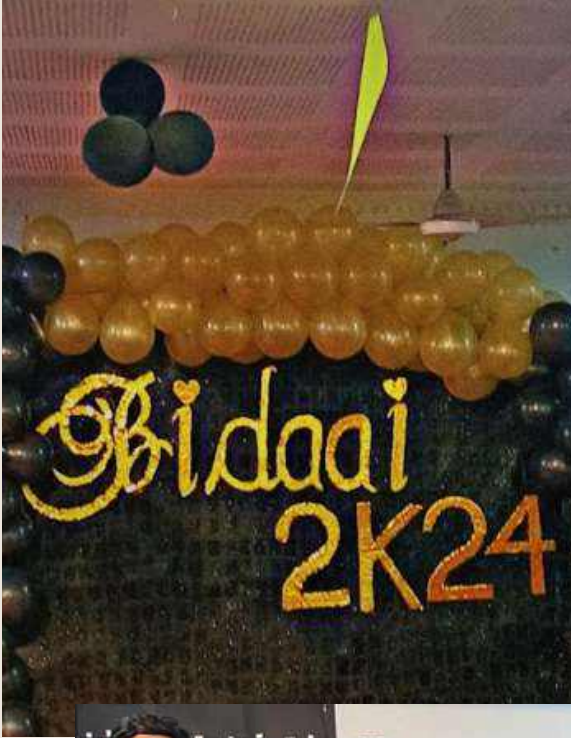
Student coordinator :
Surajni: 8857298583
Arpansh: 9779509541

Convenor :
Prof.(Dr.) Ankur Saxena
(Dean CSE/IT & Allied Branches)

Co-Convenor :
Mr. Rohit Aggarwal
Mrs. Himanshi Agarwal
Ms. Pallavi Sharma

Events & Programs

Farewell 2024



Events & Programs

Farewell 2025



Events & Programs

DIWALI CELEBRATION



*Faculty
Farewell*



Gold Medal



Ms. Jhalak Jain student of B.Tech Computer Science and Engineering (Data Science) of MIET, Meerut to be awarded with Gold Chancellor Award and a prize money of 50,000/- as a token of motivation. On 13th August AKTU will do the honors to all the achievers of the academic year 2023-24.

Jhalak excellently proved herself with her constant hard work, full dedication, and mentor guidance. We are proud to have such talented students as a part of MIET. Even last year the first Gold Chancellor award was achieved by an MIETian.

Student Achievements



Certificate of Course Completion

Arpit Tyagi

has successfully achieved student level credential for completing the Data Analytics Essentials course.

The student was able to proficiently:

- Explain how the data analytics process creates value from data.
- Explain the characteristics of data, including formats, availability and methods to acquire.
- Transform data using analytics tools.
- Analyze data using basic statistical and data preparation techniques.
- Complete hands-on lab using Excel, SQL, Tableau and other tools.
- Evaluate and share project portfolio.



Scan to Verify

Lynn Bloomer

Lynn Bloomer
Director, Cisco Networking Academy

Issued on Jul 03, 2025

Arpit Tyagi, a third-year B.Tech student specializing in CSE–Data Science, has successfully completed the “Data Analytics Essentials” certification program offered by Cisco Networking Academy.



Student Achievements



Arpit Tyagi, a third-year B.Tech student specializing in CSE–Data Science, has successfully completed a 10-week Virtual Internship offered by Google Cloud, gaining hands-on experience in cloud technologies, data analytics, and scalable infrastructure solutions.



Faculty Achievements



Ms. Pallavi Sharma, Trainer in Department of CSE-Data Science presented the research paper titled “An Optimal Approach for Government Tender Code Extraction through Extreme Multi-Label Text Classification” at the 7th International Conference on Smart Computing and Informatics 2025, held on 8th – 9th April 2025, organized by the Faculty of Engineering and Technology, Sunway University, Malaysia.



Faculty Development Program



Mr. Amod Kumar was recognized for his active engagement in the National Webinar on "Sensitization to Outcome-Based Education for Academic Excellence", held on 8th February 2025. The event was organized by the Internal Quality Assurance Cell (IQAC) at MIET, Meerut, underscoring his commitment to continuous academic improvement and quality assurance.

Mr. Amod Kumar, Assistant Professor, Department of CSE-Data Science, has actively participated in the Three-Day Faculty Development Programme (FDP) on "Applications of MATLAB in Artificial Intelligence and Machine Learning", organized by the Departments of CSE, AI & CSE, and AIML, in association with DesignTech Systems Pvt. Ltd.



Mr. Aqib Akhtar Zia, Assistant Professor, Department of CSE-Data Science, has successfully participated in the Three-Day Faculty Development Programme (FDP) on "Applications of MATLAB in Artificial Intelligence and Machine Learning", organized by the Departments of CSE, AI & CSE, and AIML at MIET, Meerut, in collaboration with DesignTech Systems Pvt. Ltd.



Research Paper Publications Details

Hybrid Deepfake Detection Framework: Integrating Customized CNN, Ensemble Learning, and Meta-Learning for Enhanced Robustness

- **Authors:** Shivani Pandey
- **Type:** Conference Paper
- **Date of Publication:** 13 May 2025
- **Indexing:** SCOPUS

Graph Based Automatic Text Summarization for Categorization of BBC News Articles

- **Author:** Shivani Pandey
- **Type:** Conference Paper
- **Date of Publication:** 26 March 2025
- **Indexing:** SCOPUS

An Optimal Approach for Government Tender Code Extraction through Extreme Multi-Label Text Classification

- **Authors:** Pallavi Sharma, Shivani Pandey
- **Type:** Conference Paper
- **Date of Publication:** – (not provided)
- **Indexing:** SCOPUS

Analysis of CNN Models for Eye Disease Classification Using Retinal Images

- **Author:** Rohit Aggarwal
- **Type:** Conference Paper
- **Date of Publication:** 29 October 2024
- **Indexing:** SCOPUS

Comparative Performance Analysis of Machine Learning Algorithms in Crop Recommendation System

- **Authors:** Amod Kumar, Rohit Aggarwal, Hemant Kumar Baranwal, Aqib Akhtar Zia
- **Type:** Conference Paper
- **Date of Publication:** 21 March 2025
- **Indexing:** SCOPUS

Student Research Paper Details

Healthcare & Medical Domain

1. Curequest: Empowering Healthcare Decisions

- **Students: Ananya Dudeja, Aditya Dabas, Kratika Singh**
- **Supervisor: Mr. Aqib Akhtar Zia**

2. Healthcare: Doctor Appointment Booking System (Duplicate entry – appears twice)

- **Students: Veer Verma, Abhishek Rai, Nipun Singhal, Vipin Pal Singh**
- **Supervisor: Mr. Aqib Akhtar Zia**

3. Heart Disease Prediction using ML

- **Students: Jatin Chauhan, Anshul Tyagi**
- **Supervisor: Mr. Hemant Kumar Baranwal**

4. Diabetes Prediction using Machine Learning

- **Students: Yashika Yadav, Shruti Singhal, Sneha**
- **Supervisor: Mr. Praveen Kumar Mishra**

5. Smart Safety Sentinel (Health & safety monitoring)

- **Students: Nandini Maheshwari, Akansha Chandra, Ayush Kumar, Tripti Tyagi**
- **Supervisor: Mr. Praveen Kumar Mishra**

Artificial Intelligence & Machine Learning

1. T20 Cricket Analysis using Machine Learning

- **Students: Harsh Verma, Shubham Yadav, Shobit Choudhary, Harsh Tyagi**
- **Supervisor: Mr. Pankaj Kumar**

2. Customer Churn Prediction Analysis

- **Students: Anant Soam, Lavnesh Kumar, Akhil Kumar, Sapna Singh**
- **Supervisor: Mr. Rohit Aggarwal**

Student Research Paper Details

3. Chatbot that can Differentiate between Land Grabbing and Domestic Violence

- **Students:** B Santosh Kumar Achary, Nishant Rohila, Arthav, Siddhant
- **Supervisor:** Mr. Rohit Aggarwal

4. A Real-Time AI System for Posture Detection and Monitoring (Duplicate entry – appears twice)

- **Students:** Vanshika Sangal, Shreya Pal
- **Supervisor:** Mr. Amod Kumar

5. Vegetable Image Classification Using ResNet

- **Students:** Aman Upadhyay, Himanshu Gupta, Krishna Kumar, Nikhil Chauhan
- **Supervisor:** Mr. Hemant Kumar Baranwal

6. Stock Price Prediction using Time Series Analysis

- **Students:** Disha Bansal, Shaqun Chauhan, Shradha
- **Supervisor:** Mr. Rohit Aggarwal

Application Development

1. World of Essential – Find Nearby Available Hotel Room

- **Students:** Sparsh Kansal, Vansh Gupta, Priyansh Vashistha
- **Supervisor:** Mr. Hemant Kumar Baranwal



Student Patent Details

1. AI Chat Bot with E-commerce Website KS Goods

- Students: Lakshay Gupta, Praharsh Goel, Dakshay Yadav, Sohail
- Supervisor: Rohit Aggarwal
- Status: Published

2. Cricket Players Value Estimation

- Students: Kartavya Tyagi, Vaibhav Gupta, Tushar Goel
- Supervisor: Hemant Kumar Baranwal
- Status: Published

3. Heart Disease Prediction using ML

- Students: Jatin Chauhan, Anshul Tyagi
- Supervisor: Hemant Kumar Baranwal
- Status: Published

4. Plant Disease Prediction using Deep Learning

- Students: Akriti Kumari, Nikita Tiwari
- Supervisor: Mr. Amod Kumar
- Status: Published

5. T20 Cricket Analysis using Machine Learning

- Students: Harsh Verma, Shubham Yadav, Shobit Choudhary, Harsh Tyagi
- Supervisor: Mr. Pankaj Kumar
- Status: Published

6. Customer Churn Prediction Analysis

- Students: Anant Soam, Lavnesh Kumar, Akhil Kumar, Sapna Singh
- Supervisor: Mr. Rohit Aggarwal
- Status: Published

7. Vegetable Image Classification using ResNet

- Students: Aman Upadhyay, Himanshu Gupta, Krishna Kumar, Nikhil Chauhan
- Supervisor: Mr. Hemant Kumar Baranwal
- Status: Published

Student Patent Details

8. Intelligent Diabetes Diagnosis: ML-Based Predictive Model for Early Detection

- **Students:** *Yashika Yadav, Kunika, Shruti Singhal, Sneha*
- **Supervisor:** *Mr. Praveen Kumar Mishra*
- **Status:** *Published*

9. ML Powered Real-time Accident and Fire Detection for Enhanced Emergency Response System

- **Students:** *Nandini Maheshwari, Akansha Chandra, Ayush Kumar, Tripti Tyagi*
- **Supervisor:** *Mr. Praveen Kumar Mishra*
- **Status:** *Published*

10. Scene to Text Conversion for Visually Impaired People

- **Students:** *Hritik Vishwakarma, Aman Chhabra, Gulshan Kumar, Harsh Baliyan*
- **Supervisor:** *Mr. Aqib Akhtar Zia*
- **Status:** *Published*

AKTU University Sports Fest Participation

Aditya Negi, a student of the B.Tech CSE–Data Science department at MIET, proudly represented the institute as a member of the MIET Kho-Kho team. Aditya contributed to securing the 1st position in the AKTU Sports Fest, 2024–25 (Zonal Level)



Shagun, a student of the B.Tech CSE–Data Science department at MIET, demonstrated exceptional athletic skill and team spirit as a key member of the MIET Kho-Kho team. Through her outstanding performance, the team secured the 1st position in the AKTU Sports Fest 2024–25 (Zonal Level).



Disha Bansal, a student of the B.Tech CSE–Data Science department at MIET, showcased commendable athleticism and team spirit as a member of the MIET Kho-Kho team. Her active participation contributed to the team's victory, securing the 1st position in the AKTU Sports Fest 2024–25 (Zonal Level).



AKTU University Sports Fest Participation

Arnav Chaudhary, a student of the B.Tech CSE–Data Science department at MIET, proudly represented the institute as a member of the MIET Kho-Kho team. Aditya contributed to securing the 1st position in the AKTU Sports Fest, 2024–25 (Zonal Level)



Rishi Raj Beniwal, a student of the B.Tech CSE–Data Science department at MIET, proudly represented the institute as a member of the MIET Kho-Kho team. Aditya contributed to securing the 1st position in the AKTU Sports Fest, 2024–25 (Zonal Level)

Shagun Chauhan, a student of the B.Tech CSE–Data Science department at MIET, exhibited remarkable athleticism and team coordination as a member of the MIET Volleyball team. Her spirited performance played a vital role in the team's participation and success during the AKTU Sports Fest 2024–25 (Zonal Level).



Faculty's Article

Machine Learning

Data Science is a multidisciplinary field that combines statistics, computer science, mathematics, and domain knowledge to extract meaningful insights and knowledge from data. It plays a crucial role in decision-making, automation, and innovation across industries with help of Artificial intelligence and Machine Learning Algorithms.

Machine Learning: A subset of Artificial intelligence known as machine learning focuses primarily on the creation of algorithms that enable a computer to independently learn from data and previous experiences. Machine learning has been broadly categorized into three categories.

1. Supervised Learning

Supervised learning is the types of machine learning in which machines are trained using well "labelled"; training data, and on basis of that data, machines predict the output. The labelled data means some input data is already tagged with the correct output.

2. Unsupervised Learning

Unsupervised learning is a type of machine learning in which models are trained using unlabeled dataset. In this learning method model will learn without any supervision and finds the pattern from unlabeled data.

3. Reinforcement Learning

Reinforcement Learning is a feedback-based Machine learning technique in which an agent learns to behave in an environment by performing the actions and seeing the results of actions. For each good action, the agent gets positive feedback as reward, and for each bad or negative action, the agent gets a penalty in case of wrong action.

Basic Key Concepts use in Machine Learning

- 1. Data** - Data is the foundation of Machine Learning; use features (input as labeled data) as labels (outputs in supervised learning).
- 2. Model** - A mathematical model use which maps the input data to output predictions.
- 3. Training** - The process of feeding data in the algorithm for training so it can learn patterns and relationships.
- 4. Prediction/Inference** - Using the trained model to make decisions on new, unseen data.
- 5. Evaluation** - To assess the model performance using with different metrics such as accuracy, precision, recall, F1-score, or MSE, RMSE, etc.

Hemant Kumar Baranval

Assistant Professor

Department of CSE-Data Science

Student's Article

AutoML

Introduction

In today's fast-moving digital world, organizations of all sizes want to use machine learning without building everything from scratch. Automated Machine Learning (AutoML) makes this possible by handling key steps such as data preprocessing, model selection, hyperparameter tuning, and deployment.

Current Trends

One of the most powerful trends shaping AutoML today is the democratization of AI. Due to platforms from Google, Microsoft, and H2O.ai, even non-specialists can now train effective models that were once limited to expert data scientists. Alongside this, the growth of low-code and no-code platforms is enabling users to build predictive systems through intuitive, drag-and-drop interfaces rather than complex programming. At the same time, a human-in-the-loop approach is gaining ground, where automation accelerates workflows but domain experts still guide decisions to ensure accuracy and relevance. Finally, with rising concerns about sustainability, AutoML is being optimized for efficiency, delivering high-performing models while reducing computational costs and minimizing environmental impact.

Future Aspects

In the near future, AutoML is likely to become as common in businesses as spreadsheets. It will be applied across industries such as healthcare, retail, and finance to make decision-making faster and more data-driven. Another direction is personalization—AutoML systems will adapt to specific industries and even individual users. With the growth of IoT and mobile devices, deploying models directly on edge devices is another promising path. Combining AutoML with generative AI is also on the horizon, enabling automated feature creation and synthetic data generation.

Challenges

Despite the progress, AutoML still faces challenges. Many systems work like a "black box," making it difficult to understand how a model was chosen. Computational demands remain high, which can limit accessibility for smaller organizations. There is also the risk of over-reliance, where important domain knowledge is ignored in favor of automation. Finally, ethical concerns remain, especially when biased data leads to biased outcomes.

Conclusion

AutoML is no longer just a research idea—it is reshaping how machine learning is used in the real world. Its value lies not in replacing data scientists but in allowing more people to benefit from AI. The next stage of growth will depend on balancing automation with human expertise, building systems that are not only powerful but also transparent and fair. If done right, AutoML could become one of the defining tools of modern data science.

Prafullit Bhattacharya

B.Tech CSE- Data Science 3rd Year

Student's Article

➔➔➔➔ **Data Science: From Raw Threads to Insights**

Think of data science as turning everyday data into smart ideas that guide the future. It is the art of transforming raw information into insights that influence decisions, create innovations, and shape lives. For instance, Netflix uses data science to predict which movie or show you might like next by analyzing your viewing history. In simple words, data science uses present information, statistics, and digital tools for continuous improvement. Before data can be used effectively, it must be cleaned. This step is crucial because raw data often contains errors, duplicates, and messy details. Clean data, when combined with smart actions, becomes the foundation of meaningful insights. The journey of data science began when people realized that only collecting information is not enough. We need a systematic way to explore data in the right ways, finding patterns, and tell the hidden stories it carries. Data science combines programming, mathematical intelligence, and logical thinking to solve problems and create strategies that actually work.

Raising trends in Data Science

Modern trends in data science are making it more powerful and accessible. Automated machine learning is allowing systems to build expert models without constant human intervention. Clean data notes help algorithms pick the best feature for accurate predictions. In agriculture, data science is being used to predict crop yields and manage resources. In education, it helps track student performance and improve learning methods. From healthcare to business, data-driven strategies are becoming the backbones of progress.

Future aspects of Data Science

The future of data science looks promising and diverse. Improved technology will increase efficiency by automating repetitive or boring tasks, freeing humans to focus on creativity and positive thinking. Data science can also contribute to environment protection by monitoring natural resources and promoting sustainable living. With the help of AI, people with disabilities can experience more independence through tools like speech recognition and smart devices. Human-AI collaboration will continue to grow, enabling discoveries in fields such as space exploration and even brain-computer interface.

Challenges in Data Science

Handling and analyzing massive datasets is not a piece of cake, and requires advanced tools and efficiency. Another issue is the integration of data from different sources. If not managed wisely, data models can even become biased and deliver unfair and misleading results. Addressing these issues is also crucial.

Conclusion

Data Science is rapidly shaping the world we live in. It holds the power to solve complex problems and improve decision-making. It is not just a tool but a growing field that is transforming industries and lives alike. With ethical and creative use, the future of data science is bright. It has potential to bring positive changes to almost every aspect of human life.

Manvi Singh

B.Tech CSE- Data Science 2nd Year

Student's Article

Data Science vs. Human Jobs: A Generational Challenge

The Changing World of Work

Data science and artificial intelligence are transforming how industries operate. From chatbots answering customer queries to robots assembling products, machines are taking on tasks once handled by humans. This raises an important question: What happens to jobs when machines get smarter?

Jobs at Risk

Roles that rely on repetition are most vulnerable. Data entry, basic customer service, and even driving may soon be automated. These jobs are faster and cheaper for machines to perform, creating uncertainty for workers who depend on them.

New Doors Opening

At the same time, data science is creating exciting new careers. Data analysts, machine learning engineers, AI ethicists, and cybersecurity experts are in high demand. Future workplaces will need humans to guide, supervise, and ethically shape how machines are used.

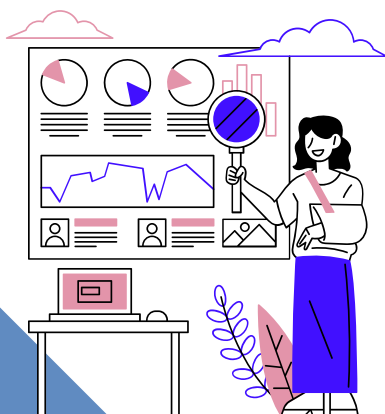
The Real Challenge

For our generation—and those to come—the real challenge is not job loss but job transformation. Machines excel at speed and accuracy, but humans bring creativity, empathy, and judgment. Success in the future will depend on adaptability, continuous learning, and embracing roles where human strengths complement technology.

Conclusion

The future of work is not humans vs. machines but humans with machines. If we prepare wisely, data science will not take away opportunities—it will redefine them. The key lies in reskilling, innovation, and working alongside technology to build a smarter and more inclusive future.

"Data will drive the machines, but creativity will always belong to humans."



Arpna Singh
B.Tech CSE- Data Science 3rd Year



Student's Article

Data Science: Trends, Future, and Challenges

In today's digital age, data has become one of the most valuable resources in the world. Every second, enormous amounts of data are being created through social media, online shopping, digital payments, mobile apps, and smart devices. To make sense of this huge amount of information, we need data science. It is a field that combines statistics, programming, and domain knowledge to find useful patterns, predictions, and solutions. Because of this, data science is now considered one of the most exciting and growing areas in technology.

Current Trends in Data Science

One of the biggest current trends is the use of Artificial Intelligence (AI) and Machine Learning (ML). These technologies are widely used in recommendation systems, chatbots, voice assistants, fraud detection, and many more applications. Generative AI, such as ChatGPT and image generators, is also becoming popular and is being used in education, healthcare, and creative industries. Another important trend is the use of Big Data analytics in almost every sector like e-commerce, banking, and transportation. Companies are also moving towards Cloud-based platforms to store and analyze data more efficiently.

Future Aspects of Data Science

The future of data science looks very promising. As technology grows, we will see even more automation in industries, better healthcare systems that can predict and prevent diseases, and smarter cities with improved traffic and energy management. Data science will also play an important role in education, where personalized learning plans can be created for each student. With the growth of the Internet of Things (IoT), devices like smartwatches, connected cars, and home assistants will generate huge amounts of data, and data scientists will be needed to handle this information.

Challenges in Data Science

Even though data science has many opportunities, it also faces some serious challenges. One of the biggest issues is data privacy and security. With personal information being collected everywhere, protecting it from misuse and cyberattacks is very important. Another challenge is the lack of skilled professionals, because learning data science requires both technical and problem-solving skills. Also, a large part of the data generated is unstructured, such as images, videos, and social media posts, which are not easy to analyze. Lastly, AI models can sometimes be biased, leading to unfair decisions, which makes ethical use of data science a major concern.

Conclusion

In conclusion, data science is not just a trend but a necessity in today's world. It is transforming industries, shaping our daily lives, and creating countless new opportunities. At the same time, it comes with challenges that we must solve responsibly. For students like us, learning data science can open many career paths and give us a chance to contribute to real-world problem solving. As technology continues to grow, the importance of data science will only increase, making it one of the most impactful fields of the future.

Aditya Sharma

B.Tech CSE (Data Science), 4th Year.

Student's Article

➤➤➤ Data Science: Creating Tomorrow Today

Data is everywhere around us, from the songs we listen to on Spotify to the routes suggested by Google Maps. What turns this endless stream of information into knowledge is data science—a field that is quietly shaping the way the world works. Right now, artificial intelligence and machine learning are at the heart of this revolution. They help Netflix suggest what we should watch next, assist doctors in predicting diseases early, and even allow cars to drive themselves. Generative AI has added a creative twist, producing music, images, and even stories, blurring the line between human imagination and machine intelligence.

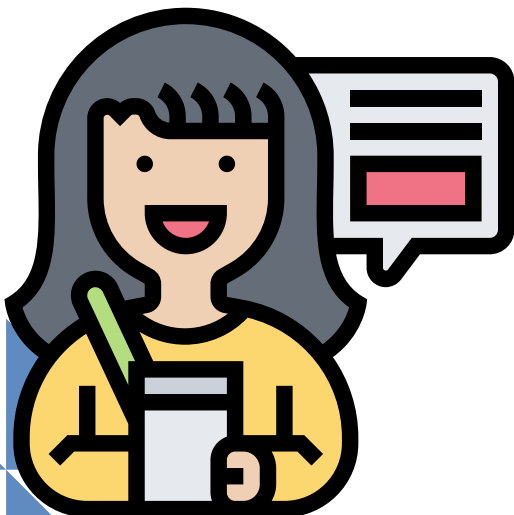
Looking ahead, data science promises an even brighter future. Imagine personalized learning where every student studies at their own pace, or smart cities that reduce traffic jams and save energy. With quantum computing on the horizon, analyzing complex data will become lightning fast, opening doors to discoveries we cannot even imagine today.

Of course, this journey is not without hurdles. Privacy concerns, biased algorithms, and the responsible use of technology are challenges that must be faced carefully. The true test of data science is not just in building powerful tools but in ensuring they are fair, transparent, and beneficial for all.

In the end, data science is more than numbers and codes. It is about solving real problems, improving lives, and designing a future where technology and humanity grow together. After all, data science is not just predicting what comes next—it is about creating a world worth living in.

Harshi Rani

B.Tech CSE- Data Science 2nd Year



Student's Article

Quantum Computing and Its Potential Influence on Data Science

Data Science has become a pillar of innovation in the modern world, leading advancements in many domains including: health, finance, supply chain, and governance. However, amidst the increasing demand for data and data science, classical computing has started to reach its breaking point. As large datasets with varying structures gather steam and the networks we are working with grow both in size and connectivity, classical computing or standard systems will struggle to identify meaning from data, as extracting insights at a meaningful pace becomes worse.

Quantum computing has allowed us to leap forward in computing and data capacities.

Unlike classical computing, quantum computing is based on a fundamentally different way of thinking about computing. Classical systems use bits which represent only a 0 or 1. Whereas, quantum computers use qubits which can exist in several states simultaneously by a property known as superposition. In addition to superposition, qubits can be entangled and interlinked, allowing for computations in parallel which neither any classical machine can currently yield. These unique properties of quantum computers allow them to conduct more complex calculations exponentially faster than classical methods, making them more valuable and well suited for resolving problems in data science.

Currently, one of the most exciting areas of development in this new paradigm is Quantum Machine

Shubham Sharma

B.Tech CSE- Data Science 2nd Year



Student's Article

From Big Data to Smart Decisions: The Expanding Role of Data Science

Data Science is an interdisciplinary field that uses scientific methods, processes, algorithms, and systems to extract knowledge and insights from structured and unstructured data. Data Science integrates statistical analysis, machine learning and domain expertise to interpret and utilize vast amounts of data.

Current Trends Shaping the Field

- Integration of AI and Machine Learning: Widely adopted for predictive modelling, recommendation systems and automated decision-making.
- Natural Language Processing (NLP): Enhancing human-computer interaction through chatbots, sentiment analysis and virtual assistants.
- Cloud and Big Data Analytics: Providing scalable infrastructure for managing and analyzing large datasets efficiently.

Future Aspects: What's Next?

- Quantum Computing: Promising exponential improvements in data processing and optimization problems.
- Agentic AI: Development of AI systems capable of autonomous decision-making.
- Sustainability Applications: Leveraging data for climate modelling, energy efficiency and global health initiatives.

Navigating the Challenges

- Data Privacy and Security: Rising concerns over ethical use and protection of personal data.
- Computational Constraints: High costs of infrastructure and processing power for large-scale models.
- Skill Gap: Demand for professionals with advanced technical and ethical competencies exceeds supply.

Conclusion

Data Science remains a dynamic and vital field. By embracing emerging trends, addressing ongoing challenges, and continuously adapting to new technologies, data scientists will continue to unlock the power of data to solve some of the world's most pressing problems.

Gauri Joshi

B.Tech CSE-Data Science 3rd Year



Student's Article

The Future of Data Science: A Student's Perspective

Data Science is a multidisciplinary field that uses scientific methods, algorithms, and systems to extract knowledge and insights from structured and unstructured data. It combines mathematics, statistics, computer science, and domain expertise to solve complex problems and make informed decisions. As a third-year student exploring this domain, I've come to appreciate how it blends these elements to uncover meaningful patterns and trends.

From predicting trends in business to improving healthcare outcomes, Data Science is transforming industries across the globe. With the rise of big data and artificial intelligence, the demand for skilled data scientists is only increasing.

In the future, we can expect Data Science to become even more integrated into our daily lives. Smart cities, personalized education, and predictive healthcare are just a few areas where data-driven solutions will play a key role.

For students like me, this means exciting career opportunities and the chance to contribute to solving realworld problems. Learning tools like Python, R, and machine learning frameworks, along with developing strong analytical thinking, are essential steps on this journey.

As we move forward, it's important to stay curious, keep learning, and embrace the challenges that come with working in such a dynamic field. Data Science isn't just about numbers it's about making a difference through data.

Krrish

B.Tech CSE-Data Science 3rd Year



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