



TECHNO INDIA NJR INSTITUTE OF TECHNOLOGY

Approved by AICTE & Affiliated to Rajasthan Technical University

www.technonjr.org

NJR Knowledge Campus, Plot-SPL-T, Bhamashah (RIICO) Industrial Area, Kaladwas, Udaipur - 313003 (Raj.)
Tel. : +91 2942650214-17 Fax :+91 2942650218, Email : technonjr@gmail.com, director@technonjr.org



Affiliated to RTU Kota



Accredited by NAAC



Approved by AICTE



Faculty Development Program


On




Data Science

 17-19 Nov., 2022

 Seminar Hall, Techno Knowledge Campus

Speaker: Mr. Lalit Yagnik, Professor, Mr. Aaditya
Maheshwari, Assistant Professor

 /TechnoIndiaNJR

   /TechnoNJROfficial

 www.technonjr.org

Faculty Development Programme Report: Data Science

Event Date: 17-19 Nov 2022

Venue: Seminar Hall

No of Participants: 12

Introduction

Data science is an interdisciplinary field that merges mathematics, statistics, specialized programming, advanced analytics, artificial intelligence (AI), and machine learning to extract actionable insights from an organization's data. These insights play a crucial role in guiding decision-making processes and strategic planning efforts.

Importance of Data Science

The exponential growth in data sources has propelled data science to become one of the fastest-growing fields across industries. Consequently, the role of data scientists has been hailed as the "best job of the 21st century" by the Harvard Business Review. Organizations increasingly rely on data scientists to interpret data and provide valuable recommendations to enhance business outcomes.

Data Science Lifecycle

The data science lifecycle encompasses various roles, tools, and processes that enable analysts to derive actionable insights. Typically, a data science project progresses through the following stages:

1. **Data Ingestion:** This stage involves collecting raw structured and unstructured data from relevant sources using diverse methods such as manual entry, web scraping, and real-time streaming from systems and devices. Data sources range from customer data to unstructured data like log files, video, audio, and social media content.
2. **Data Storage and Processing:** Given the diverse formats and structures of data, organizations must employ suitable storage systems. Data management teams set standards for data storage and structure, facilitating workflows around analytics and machine learning models. Data cleaning, deduplication, transformation, and integration using ETL (extract, transform, load) jobs ensure data quality before loading into repositories like data warehouses or data lakes.
3. **Data Analysis:** Data scientists perform exploratory data analysis to uncover biases, patterns, and distributions within the data. This exploration informs hypothesis generation for A/B testing and determines data relevance for predictive analytics, machine learning, or deep learning models. Accurate models empower organizations to make informed business decisions and drive scalability.

Communication of Insights: Insights are communicated through reports and data visualizations, making them accessible to business analysts and decision-makers. Data science programming languages like R or Python offer tools for generating visualizations, while dedicated visualization tools provide alternative options.

Conclusion

In conclusion, understanding the fundamentals of data science is crucial for organizations aiming to leverage their data for strategic advantage. The Faculty Development Programme at Techno NJR equips participants with the knowledge and skills required to navigate the intricacies of the data science lifecycle and derive actionable insights to drive business success.

List of participants:

1	Mr Abhishek Sharma
2	Mr Aditya Maheshwari
3	Mr Akhilesh Arya
4	Ms Archana Sachin Rahane
5	Ms Payal Patel
6	Mr Hitesh Sen
7	Mr Jitendra Choubisa
8	Ms Kirti Purswani
9	Ms Kriti Jain
10	Ms Nikita Menaria
11	Ms Nisha Patel
12	Mr Nishit Jain



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. ABHISHEK SHARMA

For his/her participation in Faculty Development Program on "Data Science" organized by
Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. ADITYA MAHESHWARI

For his/her participation in Faculty Development Program on "Data Science" organized by Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. AKHILESH ARYA

For his/her participation in Faculty Development Program on "Data Science" organized by Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. ARCHANA SACHIN RAHANE

For his/her participation in Faculty Development Program on "Data Science" organized by Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. PAYAL PATEL

For his/her participation in Faculty Development Program on "Data Science" organized by Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. HITESH SEN

For his/her participation in Faculty Development Program on "Data Science" organized by Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. JITENDRA CHOUBISA

For his/her participation in Faculty Development Program on "Data Science" organized by Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. KIRTI PURSWANI

For his/her participation in Faculty Development Program on "Data Science" organized by
Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. KRITI JAIN

For his/her participation in Faculty Development Program on "Data Science" organized by
Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. **NIKITA MENARIA**

For his/her participation in Faculty Development Program on "Data Science" organized by
Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. NISHA PATEL

For his/her participation in Faculty Development Program on "Data Science" organized by
Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)



TECHNO INDIA NJR
INSTITUTE OF TECHNOLOGY

Certificate of Participation

This certificate is presented to Dr./Mr./Ms. **NISHIT JAIN**

For his/her participation in Faculty Development Program on "Data Science" organized by Techno India NJR Institute of Technology Udaipur on 17-19 Nov, 2022

Mr. R.S. Vyas
(Director)