2 day Workshop on Unlock Big Data: Hands on Hadoop Mastery Report

Format: 9014/0

Organized by : **Department of Artificial Intelligence and Data Science**

Resource Person : **Mr.D. Anil Kumar, Founder & Director, Sampath info Pvt Ltd.**

Venue : **SH-004 & SH-006**

Date : **05-01-2026 TO 06-01-2026**

Event Co-Ordinators : **Mr.S.V.Swamy.**

Report

Event Overview:

This initiative was organized under the RAPTOR Students' Association (AI & DS) to provide structured exposure to Big Data platforms and Hadoop-based tools for II B.Tech students. The Department of Artificial Intelligence and Data Science organized a Two-Day Workshop titled "Unlock Big Data: Hands-on Hadoop Mastery" on 05–06 January 2026 for II B.Tech AI & DS students. The workshop was facilitated by Mr. D. Anil Kumar, Big Data Analytics and Data Engineering Training Consultant, and focused on introducing Big Data concepts, the Hadoop ecosystem, and Hive through a blend of theory and extensive hands-on sessions.

Objective:

- To introduce students to the core concepts of Big Data Analytics and the need for Hadoop in handling large-scale data.
- To familiarize students with the Hadoop ecosystem (HDFS, YARN, MapReduce, Hive) and its role in real-time data processing.
- To provide hands-on experience in Hadoop installation, file operations, and Hive queries for practical data handling.
- To bridge the gap between academic concepts and industry practices in Big Data and Data Engineering

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Event Activities:

DAY-01

On Day 01, students were introduced to Big Data Analytics, including the definition of Big Data, the four Vs, challenges of traditional systems, and the basics of distributed computing. They then explored the Hadoop ecosystem (Hadoop 1.x vs 2.x, HDFS, YARN, MapReduce) followed by hands-on practice on Hadoop image configuration using VMware, Unix basic commands, and Hadoop file handling operations

DAY-02

On Day 02, the sessions focused on Hive and its role in querying and managing data in the Hadoop ecosystem, covering Hive Query Language, joins, and handling JSON, CSV, and Parquet data formats. Students also learned about internal vs external table locations, with a deep dive into partitions and buckets, and practiced these concepts through hands-on Hive exercises.

Out Come of workshop

The workshop enabled students to gain a practical understanding of Big Data concepts and the Hadoop ecosystem, moving beyond theoretical knowledge in the curriculum. Students successfully performed end-to-end hands-on tasks such as Hadoop setup, file handling, and Hive queries, thereby improving their confidence to work with Big Data tools useful for future projects, internships, and placements.

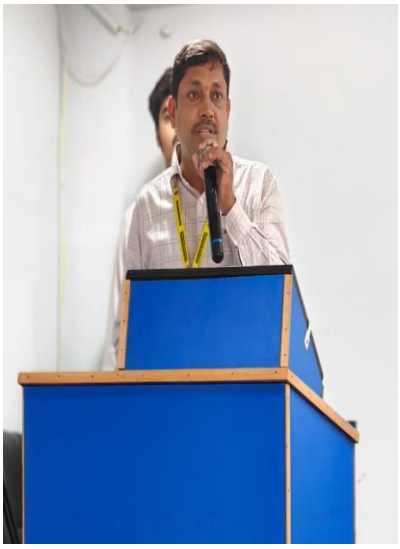
Feed Back:

Students expressed that the workshop was highly useful and practical, especially the step-by-step Hadoop and Hive hands-on sessions that clarified many doubts about Big Data tools. They appreciated the resource person's clear explanations and industry-oriented examples, and felt more confident to apply these concepts in their mini-projects, internships, and future placements.

Conclusion:

The "**Unlock Big Data: Hands-on Hadoop Mastery"** workshop successfully met its objectives by providing **II B.Tech AI & DS** students with strong conceptual clarity and practical skills in Hadoop and Hive. The sessions effectively bridged classroom learning with industry-relevant Big Data practices, motivating students to explore Data Engineering and Analytics in their future academic and career paths.

Photos:



Event Coordinator **HoD** **Dean-Academics** **Principal**