



Bhoj Reddy Engineering College for Women

(Sponsored by Sangam Laxmibai Vidyapeet, approved by AICTE and affiliated to JNTUH)
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Department of Computer Science and Engineering

File No: BRECW/ CSE/ Guest Lecture/ AY 22-23-Even/Report/ 004

Date: 26 July 2023

Report on Guest Lecture: "The Power of Big Data: Exploring its Uses and Implications".

Date: 25 July 2023

Event Venue: Seminar Hall (WB 402)



Figure 1: Banner of the Guest Lecture

The Guest Lecture started with the Welcome Address:

The guest lecture on "The Power of Big Data" began with a warm and enthusiastic welcome address by K Keerthi, from II CSE A. The student expressed gratitude to the organizing team for arranging such an enlightening event. They highlighted the importance of Big Data in today's data-driven world and the opportunities it offers for personal and professional growth.



Figure 2: Welcome address by K Keerthi, from II CSE A

Address by Seminars & Workshops In-charge, Dr. P Deepthi:

Dr. Deepthi, the In-charge of Seminars & Workshops, addressed the audience next. She appreciated the presence of esteemed speakers and attendees and highlighted the importance of staying updated with emerging technologies like Big Data. Dr. Deepthi expressed her hopes that the guest lecture would be a valuable learning experience for all.



Figure 3:Address by Seminars & Workshops In-charge, Dr. P Deepthi

Address by HoD-CSE, Dr. B Raveendranadh Singh:

Dr. B Raveendranadh Singh, Professor & Head, Department of Computer Science and Engineering, emphasized the growing importance of Big Data in various industries. He encouraged students and professionals to delve deeper into the subject to stay at the forefront of technological advancements.



Figure 4:Address by HoD-CSE, Dr. B Raveendranadh Singh

Address by Principal, Dr. E Madhusudhana Reddy:

Dr. E Madhusudhana Reddy, the Principal of the institution, acknowledged the relevance of Big Data in shaping the future of technology and data-driven decision-making. He commended the organizing team for arranging the guest lecture and encouraged participants to make the most of this valuable opportunity.



Figure 5: Address by Principal, Dr. E Madhusudhana Reddy

Keynote Address by Chief Guest, Mr. P Ram Mohan Rao:

Mr. P Ram Mohan Rao, the Chief Guest of the event, delivered an insightful keynote address on the topic "The Power of Big Data." He shared his vast industry experience and discussed the transformative impact of Big Data in businesses and society at large. He also stressed the need for skilled professionals in the field of Big Data and encouraged the audience to explore the vast potential it offers.

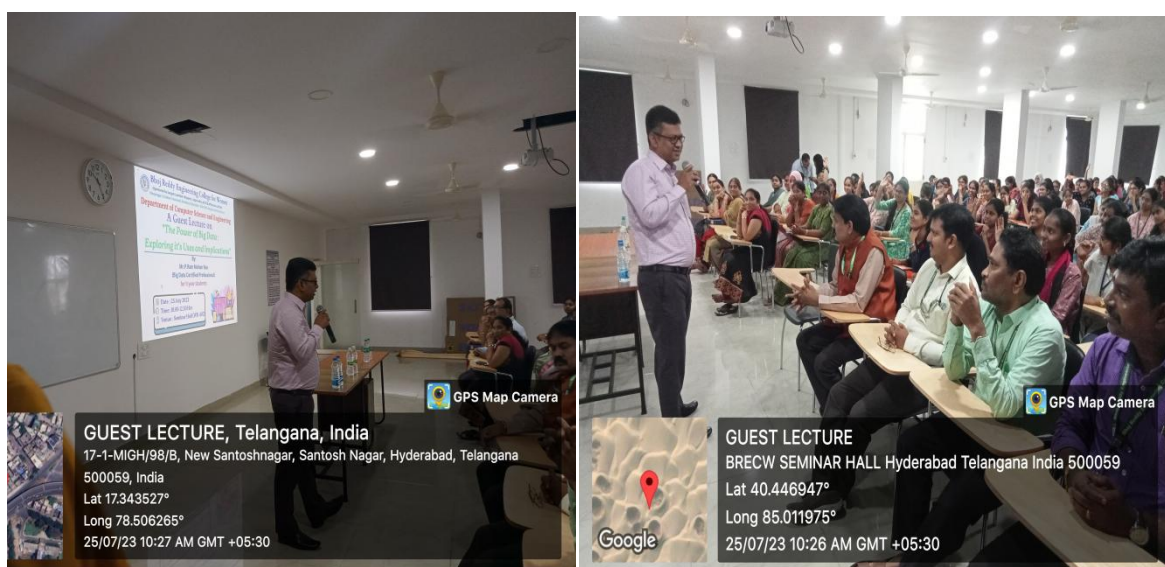


Figure 6: Address by Chief Guest, Mr. P Ram Mohan Rao

The guest lecture covered a wide array of topics related to Big Data, providing attendees with a comprehensive understanding of the subject.

The key topics covered were as follows:

Definition of Big Data:

The lecture began with a concise definition of Big Data, emphasizing the three V's - Volume, Velocity, and Variety - that characterize Big Data.

Characteristics of Big Data:

The unique characteristics of Big Data, such as its massive volume, high velocity, and diverse variety, were discussed, along with the challenges posed by these traits.

Major Problems of Big Data:

The lecture addressed the major challenges associated with Big Data, including data storage, processing speed, data quality, privacy, and security concerns.

How to Resolve Problems using Hadoop:

The role of Hadoop, an open-source distributed computing framework, in resolving the challenges of Big Data was explained. The MapReduce paradigm and Hadoop Distributed File System (HDFS) were highlighted as effective solutions.

Sources of Data:

Various sources of Big Data, such as social media, IoT devices, sensors, and transactional systems, were explored. The diversity of data sources contributes to the complexity of Big Data management.

What We Do with Data:

The lecture discussed the different stages of data processing, including data collection, storage, analysis, and visualization. The importance of deriving meaningful insights from data was emphasized.

Career Opportunities:

The guest speaker shed light on the promising career opportunities in the field of Big Data, including roles such as Data Analyst, Data Scientist, and Data Engineer.

Types of Big Data:

Structured, semi-structured, and unstructured types of Big Data were explained, providing insights into the varied nature of data.

File System and Distributed File System:

The differences between traditional file systems and distributed file systems, with a specific focus on Hadoop Distributed File System (HDFS), were discussed.

Centralized and Distributed Computing:

Attendees gained an understanding of the distinctions between centralized and distributed computing, with an emphasis on the advantages of distributed computing in handling Big Data.

SSH (Secure Shell):

The lecture touched upon SSH, a secure network protocol, highlighting its importance in secure remote access and management of distributed systems.

Massive Parallel Processing:

The concept of massive parallel processing and its role in speeding up data processing were elucidated.

Cluster and Network:

Differences between clusters and networks were explained, underscoring their roles in distributed computing and data processing.



Figure 7: Chief Guest, Mr. P Ram Mohan Rao delivering about Cluster and Network

Rack Awareness:

The lecture concluded with an explanation of rack awareness in Hadoop clusters, focusing on its impact on data locality and network efficiency.

Vote of Thanks:

The event concluded with a vote of thanks by the M Sankalpa, from II CSE B expressing gratitude to the esteemed speaker, Mr. P Ram Mohan Rao, and all attendees for their active participation. The vote of thanks also acknowledged the support of the institution's management, faculty members, and technical staff in organizing the successful guest lecture.



Figure 8:Vote of thanks by the M Sankalpa, from II CSE B

Feedback from Students:

Feedback from the students was collected at the end of the guest lecture. The response was overwhelmingly positive, with many students expressing their appreciation for the informative session. They found the topics covered to be relevant and insightful, and the explanations were easy to understand. The lecture helped students grasp the significance of Big Data in various industries and provided clarity on potential career opportunities in the field.

The "Power of Big Data" guest lecture provided valuable insights into the vast potential of Big Data, the challenges it presents, and the career opportunities it offers. Participants left the event with a deeper understanding of Big Data and its implications in the modern world.

In conclusion, the guest lecture on "The Power of Big Data" was a highly informative and valuable event, offering students and attendees an in-depth understanding of Big Data and its implications. The guest speakers' expertise and the active engagement of the audience contributed to the success of the event, leaving participants inspired and better equipped to explore the vast potential of Big Data in their academic and professional journeys.



Figure 9: Delegates on the dais HoD-CSE: Dr. B Raveendranadh Singh, Chief Guest: Mr. P Ram Mohan Rao, Principal:Dr. E Madhusudhana Reddy



Figure 10: II CSE Students attending the Guest Lecture



Figure 11: CSE Staff and II CSE Students attending the Guest Lecture



Figure 12: II CSE A Students with CSE staff



Figure 13: II CSE B Students with CSE staff

Dr P Deepthi
Seminars &
Workshops In-charge

Dr B Raveendranadh Singh
HoD-CSE