**BIG DATA ANALYTICS**

*A Seminar report submitted*

*In partial fulfillment of the requirements*

*For the award of the degree of*

**BACHELOR OF TECHNOLOGY**

**IN**

**COMPUTER SCIENCE**

**AWARDED BY**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY**

**KAKINADA**

**BY**

**S SAI SRI HARI (15H41A0552)**

Under the estimated guidance of

**Mr.Ch. Ranjith Kumar**,M.Tech.,(Ph.D)

**Associate professor**

*Department of C.S.E*



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**B.V.C. Institute of Technology and science**

**AMALAPURAM-533201**

**2017**

**B V C INSTITUTE OF TECHNOLOGY AND SCIENCE**

**AMALAPURAM-533201**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**CERTIFICATE**

This is to certify that the seminar work **“BIG DATA ANALYTICS”** submitted by **S SAI SRI HARI (15H41A0552)** is examined and adjudged as sufficient as a partial requirement for the ***BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE*** at Jawaharlal Nehru technological university, Kakinada is a bonafide record of the work done by group of the work done by group of students under my guidance an supervision.

**Head of the Department Seminar Guide**

Mr.B.V.Ram Kumar, M.Tech,(Ph.D) Mr.Ch.Ranjith Kumar, M.Tech,(Ph.D)

Professor & HOD, Associate Professor,

Department of CSE. Department of CSE.

**ACKNOWLEDGEMENT**

I would like to take this opportunity to express our heartiest concern of works to all those who have helped to me in various ways to complete my seminar

I was highly indebted to **Mr. Ch. Ranjith Kumar M.Tech,(Ph.D),** my internal guide. He has been a constant source of encouragement and has inspired me in completing the seminar and helped me at various stages of seminar.

I express my sincere thanks and deep sense of gratitude to the Head of the Department **Mr. B.V. Ram Kumar, M.Tech, (Ph.D)** **Department of CSE** for his valuable guidance, suggestions in completion of this seminar successfully.

I express my profound gratitude to our Principal **Prof. Dr. G.M.V.PRASAD,B.E,M.Tech,Ph.D,FIETE,FIE,MIEEE,MSEMCE,MISTE** for guiding me during seminar period and made it big success.

I also extend my sincere thanks to all of my faculty members for their help in completing the seminar.

**GUIDE SIGNATURE** Yours sincerely

Mr.Ch.RANJITH KUMAR, M.Tech,(Ph.D) S SAI SRI HARI

Associate Professor, (15H41A0552)

Departement CSE

**INDEX**

**Contents Page No**

* Introduction 1
* Characteristics of Big Data 3
* Architecture 4
* Technologies used 5
* Map Reduce Model 7
* Hadoop frame work 11
* Advantages of Hadoop 21
* Disadvantages of Hadoop 22
* Applications of Big Data 23
* Conclusion 28

**ABSTRACT**

Big data analytics is the process of examining large data sets to uncover hidden patterns unknown correlations, market trends, customer preferences and other useful business information. Big data consists of data sets with sizes beyond the ability of commonly used software tools to capture, curate, manage and process data with tolerable elapsed time. By applying big data principles into the concepts of machine intelligence and deep computing, IT Departments can predict potential issues and move to provide solutions before the problems even happens. It also possible to predict winners in a match using big data analytics. Future performance of players could be predicted as well, Thus players’ value and salary is determined by Data collected throughout season. Example: movie: Money Ball.

Hadoop’s unique storage method is based on distributed file system that basically ‘maps’ data wherever it is located on a cluster. The tools for data processing are often on the same servers where the data is located, resulting in much faster data processing. If you were dealing with large volumes of unstructured data, Hadoop is able to efficiently process terabytes of data in just minutes and petabytes in hours.