PUNE INSTITUTE OF COMPUTER TECHNOLOGY

DHANKAWADI, PUNE – 43

**UG SEMINAR ABSTRACT**

Academic Year: 2020-21

**DEPARTMENT: COMPUTER ENGINEERING**

**Seminar On**: Data Compression

**By** : Rajat Minekar  **Roll No**. 31448

1. Name of The Topic: Data Compression Using Huffman Coding and Comparative study with other compression algorithms.
2. Topic wise contents: 1.Introduction

2.Compression Algorithms

3.Text Compression

4.Image Compression

5.Conclusion

1. References Used:

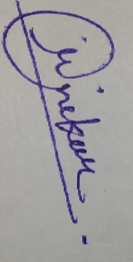
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2. Oswald, C and Sivaselvan, B. 2018. Text and Image Compression based on Data Mining Perspective. Data Science Journal, 17: 12, pp. 1–12.

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Date: 10/04/2021 

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Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

UG Seminar Coordinator

P:F- SMR- UG / 02 / R0

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Abstract**:**. Data compression is reducing the size of source data. It is the encoding technique using less bits than an actual data to make it’s representation smaller in size than actual size of data. Compression is a technology for reducing the quantity of data used to represent any content without reducing the quality of the picture. It actually reduces the number of bits required to transmit data. To store large amount of data efficiently Compression techniques are used. There are multiple techniques available for compression, This seminar proposes to analyze various compression algorithms and compare them with each other. It also includes various compression on different type of data like text , image , etc.

Technique used to reduce size of data is known as Data Compression. It is the technique used to represent data in smaller size than actual size of data by encoding it in less bits. Compression is basically technology used to represent data without reduction in quality but reduction in quantity of data. In order to store and transmit the data efficiently, compression technique came into picture. There are various techniques for data compression like lossy compression and lossless compression. This seminar proposes to analyze those compression algorithms and to study them comparatively. It also includes various compression on different types of data.

As we are in the digital era, our dependency on internet and electronic devices is increasing exponentially. 500 hours of video were uploaded on YouTube every minute as of may 2019, this is just a fraction of total data. Data compression is used to reduce this size to help in storing and transmitting data. Data compression plays such important role with internet and it has modern techniques, views and optimizations. So, selecting proper compression algorithm is important for the performance of internet.

**Keywords:** : Data compression, lossy compression, lossless compression, Compression Ratio , Huffman, LZW, RLE,ASRL, JPEG.

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REMARKS BY UG SEMINAR GUIDE:

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

UG Seminar Guide

( Prof. )