KLE Society's

KLE Technological University

A Minor Project Report

On

Content-Based Classification and Retrieval of Audio Data

Submitted in partial fulfillment of the requirement for the degree of

Bachelor of Engineering in

Computer Science and Engineering

Submitted By

Harsh Mishra	**01FE15BCS074**
Himanshu Goyal	**01FE15BCS076**
Ibtisam Shaikh	**01FE15BCS078**
Nagaraj Gojanur	**01FE15BCS107**

Under the guidance of
Prof. Vijay Biradar

SCHOOL OF COMPUTER SCIENCE & ENGINEERING**,**
HUBLI – 580 031 (India).

Academic year 2017 - 18

KLE Society's

KLE Technological University

2017 - 18

SCHOOL OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that Minor Project entitled Content-Based Classification and Retrieval of Audio Data is a bonafide work carried out by the student team Mr. Harsh Mishra – 01FE15BCS074, Mr. Himanshu Goyal – 01FE15BCS076, Ms. Ibtisam Shaikh – 01FE15BCS078, Mr. Nagaraj Gojanur – 01FE15BCS107, in partial fulfilment of completion of sixth Semester B.E. in School of Computer science and Engineering during the year 2017 – 2018. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above-said programme.

Guide   **Head of SoCSE**

Prof. Vijay Biradar   **Dr. Meena S. M**

External Viva:

       Name of the Examiners   **Signature with date**

1.

2.

ABSTRACT

With the rapid development of multimedia and network technology, more and more digital media is generated. With such huge amount of data efficient means to index the content for future retrieval must be made available. Audio content analysis for information indexing and retrieval is a relatively new field that has attracted more attention in recent years. As research works were done on the content-based retrieval of audio raw data, less attention was received to the content-based retrieval on compressed domain audio data.

Our approach focuses on analysing six different features which involve energy and RMSE, zero crossing rate, magnitude scaling (amplitude), pitch transcription (onsets), tempo (global) and beat tracking of .wav audio files and realizes the query-by-example music retrieval in a database.

The proposed software extracts the features from the audio database given as input to the software and gets trained and when the user gives an audio file as input it lists down the audio file with most similar features as output.

ACKNOWLEDGMENT

Contents