VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELGAUM – 590014

A Project report on

DESIGN OF REAL TIME SPEECH RECOGNITION SYSTEM

Submitted in partial fulfilment of the requirement for the award of degree of

BACHELOR OF ENGINEERING
IN
ELECTRONICS AND COMMUNICATION

By

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P.E.S. INSTITUTE OF TECHNOLOGY
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DECLARATION

We hereby declare that the project report entitled "**DESIGN OF REAL TIME SPEECH RECOGNITION SYSTEM"** is the bonafide record of the project carried out at **P.E.S. Institute of Technology** in partial fulfilment of the requirements for the award of degree **Bachelor of Engineering** in **Electronics and Communication Engineering** of **Visvesvaraya Technological University, Belgaum** during the academic year 2017. We further declare that the project report is not submitted to any other universities in fulfilment of the requirements for the award of any degree.

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CERTIFICATE

Certified to the project entitled **DESIGN OF REAL TIME SPEECH RECOGNITION SYSTEM** is a bonafide work carried out by **DHANANJAY KUMAR K L, KARAN G BARHANPUR** and **KIRAN UDAY PAI** bearing University Seat Number **1PI13EC030, 1PI13EC039 and 1PI13EC041** respectively in partial fulfilment for the award of **Bachelor of Engineering** in **Electronics and communication** of the **Visvesvaraya Technological University**, Belgaum during the academic year 2017. It is certified that all correction/suggestions indicated for internal assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements with respect to the project work prescribed for the said degree.

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ABSTRACT

Speech is an ancient field of study and research is being done on it till date Speech recognition system deals with analysis and recognition of the input speech signal by the machine or computer in various environments. To enhance the accuracy and capability of the system various feature extraction techniques are implemented. This Project provides a overview of Speech recognition system and its various phases like analysis, feature extraction, feature classification, modeling and testing or matching. In addition it also includes detailed study on Mel-Frequency Cepstral Coefficient (MFCC) feature extraction techniques used in Speech Recognition systems. Support vector Machine (SVM) techniques used for feature classification The main objective of this Project is to develop a Real time speech recognition system.

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