## VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI



#### A PROJECT REPORT ON

# "REAL TIME OBJECT DETECTION AND FACE RECOGNITION TO ASSIST THE VISUALLY IMPAIRED"

Submitted in partial fulfillment for the award of Degree of,

#### **BACHELOR OF ENGINEERING**

IN

COMPUTER SCIENCE & ENGINEERING

By

HARSHITH S 4AL16CS078

DHANYA BHAT 4AL17CS027

DSOUZA ELSTON RONALD 4AL17CS029

JOHN ALSTEN TAURO 4AL17CS037

Under the Guidance of

Mrs. Merlyn Melita Mathias

**Assistant Professor** 



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY MOODBIDRI-574225, KARNATAKA.

2020 - 2021

### ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY MIJAR, MOODBIDRI D.K. -574225, KARNATAKA



## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

### **CERTIFICATE**

This is to certify that the project entitled "REAL TIME OBJECT DETECTION AND FACE RECOGNITION TO ASSIST THE VISUALLY IMPAIRED" has been successfully completed by

> 4AL16CS078 HARSHITH S 4AL17CS027 DHANYA BHAT 4AL17CS029 DSOUZA ELSTON RONALD 4AL17CS037 JOHN ALSTEN TAURO

the bonafied students of DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2020-2021. It is Certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

M. Mathia Mrs.Merlyn Melita Mathias

**Project Guide** 

Dr. Manjanath Kotari

Dept. Of College of the departmentineering Washingtony Milar. Moetins Aiva's lac

**External Viva** 

Name of the Examiners

Signature with Date

- 1.
- 2.

## **ABSTRACT**

The human visual system is fast and accurate and can perform complex tasks like identifying multiple objects and detect obstacles with little conscious thought. Also humans can easily detect and identify objects present in an image. If a human is detected, the system identifies as a person. Similarly, objects detected in the vicinity will be presented in audio format to the user. Now with developments in web and computer vision technologies, we are detecting objects in images with high speed and accuracy using machines. We are using the same technology for helping visually impaired.