



NATIONAL ASSOCIATION FOR THE BLIND, INDIA

(Registered under Societies Registration Act, XXI of 1860 and Bombay Public Trusts Act, 1950)

DEPARTMENT OF EMPLOYMENT

President
Mr. Hemant Takle

Honorary Secretary General
Mr. Satya Kumar Singh

Hon. Secretary
Mr. Suhas Karnik

Ref.:EMP:SVK/2021/077

May 15, 2021

Dr. Nupur Giri
HOD - Computer Department
Vivekanand Education Society's Institute of Technology
Chembur
Mumbai 400 074.

Dear Dr. Giri,

We at NAB, India are happy to meet the students of your College along with Prof. Sharmila Sengupta, at an Online Zoom Meeting on May 7, 2021. According to previous discussions, to identify problems faced by the blind, we had realized a need for a Hardware Device to identify Indian Currency Notes and requested the students for the same.

During this meeting, the team members : Prof Sharmila Sengupta (Mentor), Mr. Jay Jhaveri, Mr. Abhay Gupta, Mr. Prem Chhabria, Mr. Neeraj Ochani of Vivekanand Education Society's Institute of Technology college showcased their project titled "**Divya Drishti (The Divine Perception)**" and explained the multiple features implemented by them. We gave them some valuable feedback and hope for meeting them again with the said changes.

Your co-operation in this endeavour will be highly appreciated.

Regards,

Yours truly,

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SUHAS V. KARNIK
HONORARY SECRETARY
NAB, India

Empowering the Blind

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**VIVEKANAND EDUCATION SOCIETY'S
INSTITUTE OF TECHNOLOGY
Department of Computer Engineering**



Certificate

This is to certify that *Jay Jhaveri, Abhay Gupta, Prem Chhabria, Neeraj Ochani* of Third Year Computer Engineering studying under the University of Mumbai have satisfactorily completed the project on “*Divya Drishti (Divine Perception)*” as a part of their coursework of MINI-PROJECT for Semester-VI under the guidance of their mentor *Prof. Sharmila Sengupta* in the year 2020-2021.

This project report entitled *Divya Drishti (Divine Perception)* by *Abhay Gupta* is approved for the degree of *Bachelor of Engineering in Computer Engineering*.

Program Outcomes	Grade
PO1,PO2,PO3,PO4,PO5,PO6,PO7,PO8,PO9, PO10, PO11, PO12, PSO1, PSO2	

Date:

Project Guide:

J. Sengupta

Abstract

Around 12 million persons in India suffer from blindness. They face challenges in performing daily activities. Major problems faced by visually impaired are recognizing currency, reading text and color identification, etc. With the advent of new technologies like Machine learning, Artificial Intelligence and rapid improvement in processing it has become possible to bridge the gap between the visually impaired people and the world.

The Objective of this system is to help/guide the visually challenged people with the help of a smart device using an Android Phone. This device will help the visually challenged person to get greater sense of awareness of surroundings around him/her and will also help him/her by protecting them against frauds. What makes this device innovative is that the device is completely Internet Free and also helps in effective communication with the help of Voice Commands as this is the only medium through which a visually challenged person can effectively communicate with an external device. Our device has successfully managed to implement multiple daily usage features like OCR, Bill Reading, Text Summarization, Mask Detection, Color Detection, Currency Detection in a single standalone portable system.

Divya Drishti also gains an upper hand when it comes to the user experience. The power bank connected device can be simply put in a bag and the user can utilize its features just from his phone. Apart from this, the Divya Drishti android application provides a voice-based and a tap-based interface that gets all the jobs done without any hassle.