

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

“Jnana Sangama” Belagavi – 590 010



PROJECT REPORT ON

**“VISION ASSISTANT FOR VISUALLY  
IMPAIRED PEOPLE”**

Submitted in partial fulfillment of the requirements for the award of degree

**BACHELOR OF ENGINEERING  
IN  
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**

Submitted By

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Under the Guidance of

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**Sr. Assistant Professor**



**ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY**

(Unit of Alva's Education Foundation (R), Moodbidri)

Affiliated to Visvesvaraya Technological University, Belagavi &

Approved by AICTE, New Delhi. Recognized by Government of Karnataka.

**Accredited by NAAC with A+ Grade**

Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka

**2023 – 2024**

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**DEPARTMENT OF  
ARTIFICIAL INTELLIGENCE & MACHINE LEARNING  
CERTIFICATE**

This is to certify that the Project entitled **"VISION ASSISTANT FOR VISUALLY IMPAIRED PEOPLE"** has been successfully completed by

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the bonafide students of Department of Artificial Intelligence & Machine Learning, Alva's Institute of Engineering and Technology in partial fulfillment for the award of **BACHELOR OF ENGINEERING** in **DEPARTMENT OF ARTIFICIAL INTELLIGENCE & MACHINE LEARNING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2023–2024. 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.

**Mr. Shrikanth N G**  
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Signature with Date

Signature with Date  
28/05/2024

## ABSTRACT

The "Visual Assistant for Visually Impaired People" project represents a pioneering initiative aimed at enhancing the independence, accessibility, and quality of life for individuals with visual impairments. Leveraging cutting-edge technologies such as computer vision, machine learning, and assistive devices, the project endeavors to address the challenges faced by the visually impaired community in navigating and interacting with their surroundings. At its core, the project focuses on the development of a comprehensive visual assistance system that interprets and analyzes visual information in real-time, providing users with accurate and contextually relevant guidance and support. Through seamless integration with specialized hardware, intuitive user interfaces, and voice-based interactions, the visual assistant aims to empower users to navigate diverse environments, recognize objects and people, and access information independently. Ethical considerations, including biases in AI algorithms and data privacy, are carefully addressed to ensure the trustworthiness and fairness of the technology. Moreover, the project emphasizes collaboration and partnerships with stakeholders across various sectors, including academia, industry, and the visually impaired community, to co-create solutions that meet the unique needs and preferences of users.