VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JnanaSangama"Belagavi-590018



PROJECT REPORT ON

"HEMICARE: Smart finger command generation and in-home health care in hemiplegia patients"

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

BACHELOR OF ENGINEERING IN ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

A+, ACCREDITATION BY NACC AND NBA, MIJAR – 574 225. 2023-2024

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY MOODBIDRI – 574 225

(Affiliated to VTU, BELAGAVI)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
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CERTIFICATE

Certified that the project work entitled "HEMICARE: SMART FINGER COMMAND GENERATION AND IN-HOME HEALTH CARE IN HEMIPLEGIA PATIENTS" is a bona fide work carried out by

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in partial fulfillment for the award of BACHELOR OF ENGINEERING in ELECTRONICS & COMMUNICATION ENGINEERING 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.

Signature of the Guide

Dr. Roshan Shetty

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ABSTRACT

This project explores the innovative realm of in-home health monitoring for individualities affected by hemiplegia, a enervating condition constantly stemming from neurological conditions analogous as strokes. The project delves into the development and integration of a comprehensive system with wearable bias designed to empower individuals with hemiplegia to manage their health within the comfort of their homes. The system incorporates wearable sensors for real-time monitoring of vital signs, movement, and fall discovery. This system accompanies and provides a user-friendly interface, enabling indefectible communication with healthcare professionals, medicine operation, and substantiated rehabilitation exercises. The project highlights the implicit impact of Hemicare in enhancing the overall quality of life for individualities with hemiplegia, emphasizing user vacuity, data security, and collaboration with healthcare providers.