VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI



A PROJECT REPORT ON

"FINGERTIP DETECTION FOR HUMAN-COMPUTER INTERACTION"

Submitted in partial fulfillment for the award of Degree of,

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE & ENGINEERING

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Under the Guidance of Ms. Megha D. Hegde Assistant Professor



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2020 - 2021

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that the project entitled "FINGERTIP DETECTION FOR HUMAN-COMPUTER INTERACTION" has been successfully completed by

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the bonafide 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.

Ms. Megha D. Hegde

Project Guide

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ABSTRACT

Fingertip recognition and tracking is a significant component of numerous Computer vision applications. In the field of gesture recognition and image processing, fingertip tracking is a high-resolution technique developed in 1969 that is employed to know the consecutive position of the fingers of the user. Due to high necessity of fingertip data for video signal acknowledgment innovation, a strategy for fingertip discovery is proposed. Numerous vision based applications have utilized fingertips to follow or control signals in their applications. Fingertip detection for human-Computer interaction is an undertaking to draw and associate with system simply by waving your finger noticeable all around. Finger detection and tracking involves writing characters or words in free space utilizing finger or hand movements without the guide of any hand-held gadget.