VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belgavi-590 018, Karnataka State, India

A PROJECT REPORT

ON

"REAL-TIME ATTENTION SPAN TRACKING IN ONLINE EDUCATION"

Submitted on partial fulfillment of academic requirement for the academic year 2022-2023

BACHELOR OF ENGINEERING
IN
INFORMATION SCIENCE AND ENGINEERING

Submitted by:

ADARSH K R	**1SJ19IS002**
RAKSHITHA H G	**1SJ19IS128**
G YOGA SAI GANESH	**1SJ19IS036**
GOVARDHAN J A	**1SJ19IS038**

Under the guidance of:
Prof. Ambika L G
Assistant Professor
Dept. of ISE, SJCIT

S J C INSTITUTE OF TECHNOLOGY
DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING
CHIKKABALLAPUR-562 101

2022-2023

|| Jai Sri Gurudev ||
Sri Adichunchanagiri Shikshana Trust ®

S J C INSTITUTE OF TECHNOLOGY

Chickballapur-562101
Department of Information Science & Engineering

CERTIFICATE

This is to certify that the Project work entitled "Real-Time Attention Span Tracking in Online Education" is a work carried out by ADARSH K R (1SJ19IS002), RAKSHITHA H G (1SJ19IS128), G YOGA SAI GANESH (1SJ19IS036), GOVARDHAN J A (1SJ19IS038) respectively in partial fulfillment for the award of **Bachelor of Engineering** in **Information Science and Engineering,** from **Visvesvaraya Technological University, Belagavi** during the year of **2022-23.** It is certified that all corrections / suggestions indicated for internal assessment have been incorporated in the report. This project report has been approved as is satisfies the academic requirements in respect of project work prescribed for the said degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Prof. Ambika L G	**Prof. Satheesh Chandra Reddy S**	**Dr. G.T Raju**

External Examiners:

Name of the Examiners: Signature with Date

1.

2.

DECLARATION

We **ADARSH K R, RAKSHITHA H G, G YOGA SAI GANESH, GOVARDHAN J A,** the members of 8th Semester B.E Information Science and Engineering, S J C Institute of Technology, Chickkaballapur, hereby declare that the Project Work entitled **"REAL-TIME ATTENTION SPAN TRACKING IN ONLINE EDUCATION"** has been independently carried out by us under the supervision of our guide, **Prof. Ambika L G, Assistant Professor , S J C Institute of Technology, Chickkaballapur** and submitted in fulfilment for the award of degree in Bachelor of Engineering in Information Science andEngineering of Visvesvaraya Technological University, Belagavi, during the academic year 2022- 2023. We further declare that the report has not been submitted to any other university for award of any other degree.

Place:- Chickkaballapur
Date:-

ADARSH K R (1SJ19IS002)
RAKSHITHA H G (1SJ19IS128)
G YOGA SAI GANESH (1SJ19IS036)
GOVARDHAN J A (1SJ19IS038)

ABSTRACT

Over the last decade, e-learning has revolutionized how students learn by providing them access to quality education whenever and wherever they want. However, students often get distracted because of various reasons, which affect the learning capacity to a great extent. Many researchers have been trying to improve the quality of online education, but we need a holistic approach to address this issue. This paper intends to provide a mechanism that uses the camera feed and microphone input to monitor the real-time attention level of students during online classes. We explore various image processing techniques and machine learning algorithms throughout this study. We propose a system that uses five distinct non-verbal features to calculate the attention score of the student during computerbased tasks and generate real-time feedback for both students and the organization. We can use the generated feedback as a heuristic value to analyze the overall performance of students as well as the teaching standards of the lecturers.

ACKNOWLEDGEMENT

The Project report is successfully completed and was made possible due to cooperation, assistance and suggestions of many people whom we would like to express our sincere gratitude and thanks.

With Great pride we would like to convey our gratitude and appreciation to our Institution **"SJC Institute of Technology"** for giving us the required platform for the fulfillment of the Project report on "**Real-time attention span tracking in online education**" as per the V.T.U requirements, for the Eight semester.

We express our sincere thanks to **Dr. G T Raju**, Principal of **SJCIT** for providing us with excellent infrastructure and facilities to complete the Project.

We express whole hearted gratitude to **Prof. Satheesh Chandra Reddy,** who is the respected **HOD of Information Science and Engineering Department**. We wish to acknowledge his help in making our task easy by providing us with his valuable help and encouragement.

We express our sincere thanks to Project coordinator **Prof. Aravinda Thejas Chandra, Associate Professor, Information Science and Engineering, SJCIT** providing us with excellence infrastructure to complete Final year project .

It is our pleasure to thank our guide **Prof. Ambika L G, Assistant Professor, Department of Information Science and Engineering, SJCIT** for his guidance, encouragement and valuable suggestion from the beginning of the Project work till the completion without which this project work would not have been accomplished.

And last but not the least, we would be very pleased to express our heart full thanks to the teaching and non-teaching staff of the Department of Information Science and Engineering, SJCIT for their motivation and support.

ADARSH K R	**1SJ19IS002**
RAKSHITHA H G	**1SJ19IS128**
G YOGA SAI GANESH	**1SJ19IS036**
GOVARDHAN J A	**1SJ19IS038**

TABLE OF CONTENTS

LIST OF FIGURES

SNAPSHOTS

LIST OF TABLES