Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)
Re-accredited with 'A++' Grade by NAAC.CGPA 3.65/4, Category I by UGC
Coimbatore – 641 043, Tamil Nadu, India

PLAGIARISM CHECK REPORT (THESES)

1.	Name of the Research Scholar	M. Mohana
2.	Roll No. and Year of Registration	20PHCSF001, 2021
3.	Department	Computer Science
4.	Name of the Research Guide	Dr. P. Subashini
5.	Title of the Thesis / Dissertation	Deep Learning-Based Facial Expression Recognition for Analysing Learner Engagement in Mulsemedia Enhanced Teaching
6.	Similarity Content (%) Identified	**5%**
7.	Software Used	Turnitin
8.	Date of Verification	27-11-2024

Note : The report is excluding 14 Consecutive words, Review of Literature and Quoted Materials.

Checked by :

27/11/24
Information Scientist

M. Mohana
Research Scholar

27.11.24
Assistant Librarian

27/11/2024
Research Guide

Date: 27-11-2024

Avinashilingam Institute For Home Science & Higher Education For Women

Certificate of Plagiarism Check for Thesis

Author Name	M. Mohana
Course of Study	Doctor of Philosophy
Name of Guide	Dr. P. Subashini
Department	Computer Science
Acceptable Maximum Limit	10%
Submitted By	library@avinuty.ac.in
Paper Title	Deep Learning-Based Facial Expression Recognition for Analysing Learner Engagement in Mulsemedia Enhanced Teaching
Similarity	3%
Paper ID	2604041
Total Pages	118
Submission Date	2024-11-27 14:33:34

27/11/24
Information Scientist

M. Mohana
Research Scholar

27.11.24
Assistant Librarian

28/11/2024
Research Guide

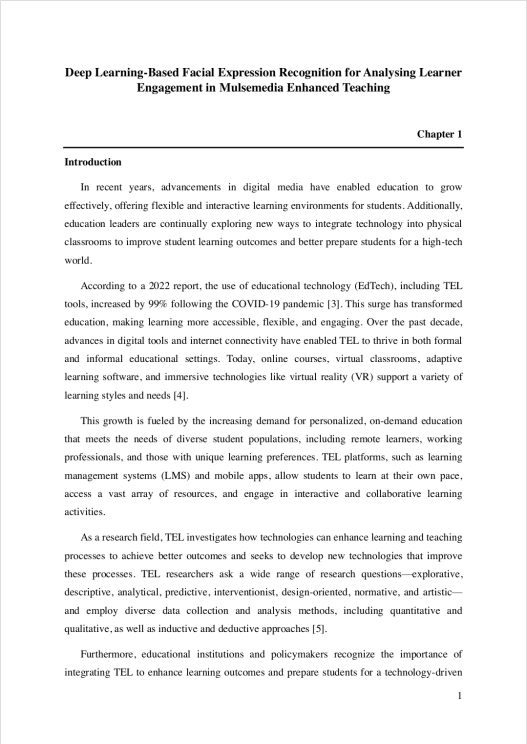
* This report has been generated by DrillBit Anti-Plagiarism Software

Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author:	Central Library Avinashilingam
Assignment title:	Paper 2024
Submission title:	Deep Learning-Based Facial Expression Recognition for Anal...
File name:	Thesis-Plagiarism_1.docx
File size:	15.68M
Page count:	118
Word count:	24,510
Character count:	150,019
Submission date:	27-Nov-2024 02:33PM (UTC+0530)
Submission ID:	2327539336



Deep Learning-Based Facial Expression Recognition for Analysing Learner Engagement in Mulsemedia Enhanced Teaching

Chapter 1

Introduction

In recent years, advancements in digital media have enabled education to grow effectively, offering flexible and interactive learning environments for students. Additionally, education leaders are continually exploring new ways to integrate technology into physical classrooms to improve student learning outcomes and better prepare students for a high-tech world.

According to a 2022 report, the use of educational technology (EdTech), including TEL tools, increased by 99% following the COVID-19 pandemic [3]. This surge has transformed education, making learning more accessible, flexible, and engaging. Over the past decade, advances in digital tools and internet connectivity have enabled TEL to thrive in both formal and informal educational settings. Today, online courses, virtual classrooms, adaptive learning software, and immersive technologies like virtual reality (VR) support a variety of learning styles and needs [4].

This growth is fueled by the increasing demand for personalized, on-demand education that meets the needs of diverse student populations, including remote learners, working professionals, and those with unique learning preferences. TEL platforms, such as learning management systems (LMS) and mobile apps, allow students to learn at their own pace, access a vast array of resources, and engage in interactive and collaborative learning activities.

As a research field, TEL investigates how technologies can enhance learning and teaching processes to achieve better outcomes and seeks to develop new technologies that improve these processes. TEL researchers ask a wide range of research questions—explorative, descriptive, analytical, predictive, interventionist, design-oriented, normative, and artistic—and employ diverse data collection and analysis methods, including quantitative and qualitative, as well as inductive and deductive approaches [5].

Furthermore, educational institutions and policymakers recognize the importance of integrating TEL to enhance learning outcomes and prepare students for a technology-driven

1

Deep Learning-Based Facial Expression Recognition for Analysing Learner Engagement in Mulsemedia Enhanced Teaching

by Central Library Avinashilingam

Submission date: 27-Nov-2024 02:33PM (UTC+0530)
Submission ID: 2327539336
File name: Thesis-Plagiarism_1.docx (15.68M)
Word count: 24510
Character count: 150019

Deep Learning-Based Facial Expression Recognition for Analysing Learner Engagement in Mulsemedia Enhanced Teaching

ORIGINALITY REPORT

5%	1%	5%	0%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	M. Mohana, P. Subashini, Diksha Shukla. "Revisiting face detection: Supercharging Viola-Jones with particle swarm optimization for enhanced performance", Journal of Intelligent & Fuzzy Systems, 2024 Publication	2%
2	M. Mohana, P. Subashini, M. Krishnaveni. "Emotion Recognition from Facial Expression Using Hybrid CNN–LSTM Network", International Journal of Pattern Recognition and Artificial Intelligence, 2023 Publication	1%
3	M. Mohana, P. Subashini, M. Krishnaveni. "Emotion Recognition from Facial Expression using Hybrid CNN-LSTM Network", International Journal of Pattern Recognition and Artificial Intelligence, 2023 Publication	1%
4	www.mdpi.com Internet Source	<1%