



# Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

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**Dr. U T Vijay**

Executive Secretary

19th April, 2024

Ref: 7.1.01/SPP/37

To,  
The Principal  
Alva's Institute of Engineering and Technology  
Shobavana Campus Mijar  
Moodbidri - 574 225

Dear Sir/Madam,

Sub : Sanction of Student Project - 47th Series: Year 2023-2024

**Project Proposal Reference No. : 47S\_BE\_0952**

Ref : Project Proposal entitled

**AN INDEPENDENT AUTOMATIC SYSTEM TO DETECT THE  
PRESENCE OF VIOLENCE DETECTION USING DEEP LEARNING  
TECHNIQUE**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 47th Series". The project details are as below:

<b>Student(s)</b>	Ms. SUSHMITHA E	<b>Department</b>	COMPUTER SCIENCE AND ENGINEERING
	Ms. SINCHANA R. NAIK		
	Ms. SPANDHANA		
	Ms. VEENA G. T.		
<b>Guide(s)</b>	Mr. GIRIDHAR GOWDA	<b>Sanctioned Amount (in Rs.)</b>	5,000.00
	Mrs. VIDYA		

## Instructions:

- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/6s8hq5XbScsBMv3G9>. The synopsis should include following:
  - Project Reference Number
  - Title of the project
  - Name of the College & Department
  - Name of the students & Guide(s)
  - Keywords
  - Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
  - Objectives (about 10 lines)

PRINCIPAL  
Alva's Institute of Engg. & Technology,  
Shobavana Campus Mijar - 574 225, D.K.

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,  
BELAGAVI**



**A PROJECT REPORT ON  
“AN INDEPENDENT AUTOMATIC SYSTEM TO  
DETECT THE PRESENCE OF VIOLENCE USING  
DEEP LEARNING TECHNIQUES”**

Submitted in partial fulfillment for the award of Degree of  
**BACHELOR OF ENGINEERING**

**IN  
COMPUTER SCIENCE & ENGINEERING**

By

<b>SINCHANA R NAIK</b>	<b>4AL20CS149</b>
<b>SPANDHANA</b>	<b>4AL20CS150</b>
<b>SUSHMITHA E</b>	<b>4AL20CS156</b>
<b>VEENA G T</b>	<b>4AL20CS169</b>

Under the Guidance of  
**Mr. Giridhar Gowda**  
Senior Assistant Professor



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY  
MOODBIDRI-574225, KARNATAKA**

**2023-24**



ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY  
MIJAR, MOODBIDRI D.K. -574225, KARNATAKA



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
CERTIFICATE

This is to certify that the project entitled **"AN INDEPENDENT AUTOMATIC SYSTEM TO DETECT THE PRESENCE OF VIOLENCE USING DEEP LEARNING TECHNIQUES"** has been successfully completed by

SINCHANA R NAIK	4AL20CS149
SPANDHANA	4AL20CS150
SUSHMITHA E	4AL20CS156
VEENA G T	4AL20CS169

bonafide students of DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2023-24. 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. Giridhar Gowda  
Project Guide

Dr. Manjunath K. K.  
Head of the Department  
Dept. of Computer Science & Engineering  
Alva's Institute of Engineering and Technology  
Mijar, Moodubidri - 574 225, D.K. Karnataka, India

Dr. Peter Fernandes  
Principal

Name of the Examiners

Signature with Date

1.

2.

## ABSTRACT

Creating a system that can automatically detect violence in videos using advanced deep learning techniques. By utilizing convolutional neural networks (CNNs) for image and video processing the system can effectively detect violent actions. The system utilizes deep neural networks trained on datasets of violent and non-violent actions to automatically recognize patterns indicative of violence in video streams. Upon detecting potential instances of violence, the system can trigger appropriate responses, such as alert notifications in Gmail. This technology aims to assist law enforcement and security personnel in monitoring and responding to violent incidents more effectively, ultimately contributing to public safety. The successful deployment of this technology could significantly improve the efficiency and effectiveness of public safety measures, reducing response times to violent incidents and ultimately contributing to the prevention and deterrence of violence in various contexts. Ongoing research in this area focuses on further refining the model's accuracy, scalability, and adaptability to different surveillance scenarios and operational environments. Main aim of our project is to detect violence in uploaded videos using advanced deep learning techniques. By analysing visual cues and patterns in video footage, our system can identify potentially violent actions or behaviours.