



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_1608
Ref : Project Proposal entitled **VEIN BIOMETRIC RECOGNITION ON SMARTPHONE**

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:

Student(s)	Ms. MEGHANA K.	Department	INFORMATION SCIENCE AND ENGINEERING
	Ms. CHANDANA A. S.		
	Ms. MADHU M.		
	Ms. VARSHA A. M.		
Guide(s)	Ms. LOLAKSHI P. K.	Sanctioned Amount (in Rs.)	3,500.00

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)

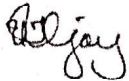
47S_BE_1608

- 8) Methodology (about 20 lines on materials, methods, details of work carried out, including drawings, diagrams etc)
- 9) Results and Conclusions (about 20 lines with specific reference to work carried out)
- 10) Scope for future work (about 20 lines).
- e) In case of incompleted projects, the sanctioned amount shall be returned to KSCST.
- f) The sanctioned amount will be transferred by NEFT to the bank account provided by the College/Institute.
- g) The sponsored projects evaluation will be held **third week of May 2024** onwards through Online Mode and the details of the same will be intimated shortly by email / Website
- h) After completion of the project, soft copy of the project report duly signed by the Principal, the HoD, Guide(s) and student(s) shall be uploaded in the following Google Forms Link <https://forms.gle/Mi446v1U5fdFcMD99>. The report should be prepared in the format prescribed by the university.
- i) The **Utilization Certificate and Statement of Expenditure duly signed by competent authority** of consolidated sanctioned projects from your institution need to be submitted **20 August 2024** without fail.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.org.in

Thanking you and with best regards,

Yours sincerely,



(U T Vijay)

Copy to:

- 1) The HoD
INFORMATION SCIENCE AND ENGINEERING
ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY, MOODBIDRI
- 2) Ms. LOLAKSHI P. K.
INFORMATION SCIENCE AND ENGINEERING
ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY, MOODBIDRI
- 3) THE ACCOUNTS OFFICER
KSCST, BENGALURU



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

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM, KARNATAKA- 590014**



A PROJECT REPORT ON

**DYNAMIC TRAFFIC TOLLING PREDICTION USING
SOFT COMPUTING AND OPEN CV**

Submitted in partial fulfilment for the award of Degree of,

BACHELOR OF ENGINEERING

IN

INFORMATION SCIENCE AND ENGINEERING

By

CHANDANA A S

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MEGHANA K

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Under the guidance of

Ms.Lolakshi P K

Assistant Professor

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING



**ALVA'S
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MIJAR, MOODBIDRI D.K -574225

2023-24

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MIJAR, MOODBIDRI D.K. -574225

KARNATAKA



DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that the project entitled **"DYNAMIC TRAFFIC TOLLING PREDICTION USING SOFT COMPUTING AND OPEN CV"** has been successfully completed by

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the bonafide students OF **DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING, Alva's Institute of Engineering and Technology**, Moodbidri affiliated to **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the academic 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 in partial fulfillment of awarding Bachelor of Engineering degree.


Ms. Lolakshi P K

Assistant Professor
Project Guide

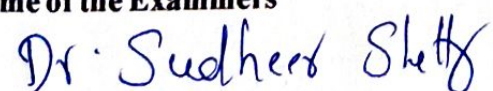
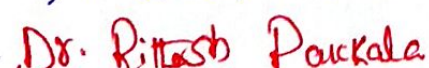

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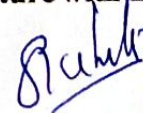
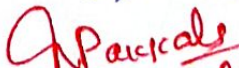

Dr. Peter Fernandes
PRINCIPAL

Principal
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225, D.K.

Name of the Examiners

1.  **Dr. Sudheer Shetty**
2.  **Dr. Ritesh Pawkala**

Signature with Date

 **29/5/24**
 **29/5/24**

**ALVA'S INSTITUTE OF ENGINEERING &
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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

DECLARATION

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hereby declare that the dissertation entitled, **"DYNAMIC TRAFFIC TOLLING PREDICTION USING SOFT COMPUTING AND OPEN CV"** is completed and written by us under the supervision of our guide **Ms.Lolakshi P K, Assistant Professor, Department of Information Science and Engineering, Alva's Institute of Engineering And Technology, Moodbidri**, in partial fulfillment of the requirements for the award of the degree BACHELOR OF ENGINEERING in **DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the academic year 2023-24. The project report is original and it has not been submitted for any other degree in any university.

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MEGHANA K

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4AL20IS059 *Varsha*

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany a successful completion of any task would be incomplete without the mention of people who made it possible, success is the epitome of hard work and perseverance, but steadfast of all is encouraging guidance.

So, with gratitude we acknowledge all those whose guidance and encouragement served as beacon of light and crowned the effort with success.

We thank our beloved Principal **Dr. PETER FERNANDES**, for his constant help and support throughout.

We sincerely thank, **Dr. SUDHEER SHETTY**, Professor and Head, Department of Information Science & Engineering who has been the constant driving force behind the completion of the project.

The selection of this Synopsis as well as the timely completion is mainly due to the interest and persuasion of our Project guide **Ms. LOLAKSHI P K**, Assistant Professor, Department of Information Science & Engineering. We will remember her contribution for ever.

We thank our beloved Project Coordinator **Prof. JAYANTKUMAR A RATHOD**, Associate Professor, Department of Information Science & Engineering, for his constant guidance and help.

We are indebted to **Management of Alva's Institute of Engineering and Technology, Mijar, Moodbidri** for providing an environment which helped us in completing our Synopsis.

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ABSTRACT

In response to the rapid urbanization and escalating vehicular traffic, smart city initiatives have become imperative for fostering sustainable urban development. Urban planners grapple with myriad challenges, chief among them being the effective management of traffic congestion. This congestion not only undermines transportation system efficiency but also precipitates environmental degradation and economic losses. Dynamic traffic tolling emerges as a promising solution to alleviate congestion by dynamically adjusting toll prices based on real-time traffic conditions. However, the effective implementation of dynamic tolling hinges on accurate prediction models to anticipate traffic patterns and optimize tolling strategies. This research project proposes a novel method to predict traffic flow in smart cities using computational software. Leveraging computational software techniques such as neural networks, fuzzy logic, and genetic algorithms offers the flexibility needed to model nonlinear relationships in traffic dynamics. The project aims to develop powerful predictive models capable of accurately and efficiently forecasting traffic and congestion levels. By leveraging the power of software calculations, this endeavor seeks to provide urban planners with indispensable tools to enhance traffic management strategies and promote more sustainable urban environments.

TABLE OF CONTENTS

CHAPTER NO.	DESCRIPTIONS	PAGE NO.
	ACKNOWLEDGEMENT.....	i
	ABSTRACT.....	ii
	LIST OF FIGURES	iii
	LIST OF TABLES	iv
1.	INTRODUCTION	1-11
1.1	DEEP LEARNING	2-4
1.2	DEEP LEARNING VS MACHINE LEARNING	4-5
1.3	CONVOLUTIONAL NEURAL NETWORK(CNN)	5-10
1.4	PROBLEM STATEMENT	10
1.5	OBJECTIVES	11
2.	LITERATURE REVIEW	12-13
3.	SYSTEM REQUIREMENTS AND SPECIFICATION	14-17
3.1	FUNCTIONAL REQUIREMENTS	14
3.2	NON-FUNCTION REQUIREMENTS	15
3.3	FEASIBILITY STUDY	16
3.4	SOFTWARE ANALYSIS	16-17
3.5	SOFTWARE DESCRIPTION	17
4.	SYSTEM ANALYSIS	18-19
4.1	EXISTING SYSTEM	18
4.2	PROPOSED SYSTEM	18-19
4.3	PERFORMANCE ANALYSIS	19
5.	SYSTEM DESIGN	20-26
5.1	ARCHITECTURE DAIGRAM	20
5.2	UML DAIGAM	21-22

LIST OF FIGURES

5.3	SEQUENCE DAIGRAM	22
5.4	COLLABORATION DAIGRAM	23
5.5	ACTIVITY DAIGRAM	24
5.6	DEPLOYMENT DAIGRAM	25
5.7	DETAILED DESIGN	26
6.	METHODOLOGY	27-35
6.1	TRAINING USING YOLOV8 ALOGIRTHM	28-30
6.2	ALGORITHM USED	30-31
6.3	IMPLEMENTATION	31-35
7.	SYSTEM TESTING	36-38
7.1	TESTING OBJECTIVES	36
7.2	UNIT TESTING	37-38
7.3	ACCEPTANCE TESTING	38
8.	RESULTS	39-40
9.	CONCLUSION AND FUTURE ENHANCEMENT	41
	REFERENCES.....	42
	APPENDIX A	43-54
	APPENDIX B	55

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1.1	A Venn diagram describing deep learning as a subfield of machine learning which a subfield of artificial intelligence is in turn.	7
1.2	Layers of CNN	8
5.1	Architecture Diagram	20
5.2	Use case Diagram	21
5.3	Sequence Diagram	22
5.4	Collaboration Diagram	23
5.5	Activity Diagram	24
5.6	Deployment Diagram	25
6.1	Architecture of Yolov8	28
6.2	The object are converted into frames using CNN algorithms	35
7.1	YOLOV5	37
8.1	YOLOV8l model performance	39
8.2	The frames generated from the video	40
8.3	YOLO model comparison with COCO MAP model	40

INTRODUCTION