KSCST

Karnataka State Council for Science and Technology
(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)
Indian Institute of Science Campus, Bengaluru - 560 012
Telephone: 080-23341652, 23348848, 23348849, 23348840
Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ **Website:** www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar
Executive Secretary

19th April 2021

Ref: 7.1.01/SPP/10

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

Dear Sir/Madam,

Sub : Sanction of Student Project - 44th Series: Year 2020-2021
Your Project Proposal Reference No. : ***44S_BE_3784***
Ref : Your Project Proposal entitled " ***SING LAGUAGE DETECTION USING CONVOLUTION NEURAL NETWORK***

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 44th Series" with a budgetary break-up as detailed below:

Student / s	Mr. Dikshit Kotian	**Budget**	
	Mr. T K Harshith Prasad	**Particulars**	**Amount (Rs.)**
	Mr. Srihari B	Materials/Consumables	3,000.00
	Ms. Anjali C J	Labour	-
Guide/s	Mr. Sharan L Pais	Travel	500.00
		Miscellaneous	-
Department	Information Science And Engineering	Report	500.00
		Total	**4,000.00**
	FOUR THOUSAND RUPEES ONLY		

The following are the guidelines to carryout the project work :

a) The project should be performed based on the objectives of the proposal sent by you.

b) The project should be completed in all respects and softcopy of the full report in a CD (single file .pdf format only) should be submitted to KSCST.

c) Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.

d) Please quote your **project reference number printed above** in all your future correspondences.

e) **Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :

1) Title of the project
2) Name of the College & Department
3) Name of the students & Guide(s)
4) Keywords

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

44S_BE_3784

6) Introduction / background
(with specific reference to the project, work done earlier, etc) - about 20 lines
6) Objectives (about 10 lines)
7) Methodology (about 20 lines)
(materials, methods, details of work carried out, including drawings, diagrams etc)
8) Results and Conclusions
(about 20 lines with specific reference to work carried out)
9) Scope for future work (about 20 lines).
(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

The sanctioned amount will be sent to the Principal / Head of the Institute by NEFT details provided by the college/institution.

The sponsored projects evaluation will be held in the Nodal Centre /online platform and the details of the same will be intimated shortly by e-mail / Website announcement.

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

Thanking you and with best regards,

Yours sincerely,

(H. Hemanth Kumar)

Copy to (by email):
1) Dr. Kiran B Malagi
SPP Coordinator
Alva'S Institute Of Engineering And Technology,
Shobavana Campus,
Mijar, Moodbidri - 574 225.

2) Mr. Sharan L Pais
Department of Information Science And Engineering
Alva'S Institute Of Engineering And Technology,
Shobavana Campus,
Mijar, Moodbidri - 574 225.

3) The Finance Officer, KSCST, Bangalore

Encl: As Above

A Project Report

On

SIGN LANGUAGE DETECTION USING CONVOLUTIONAL NEURAL NETWORK

Submitted to

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELGAUM, KARNATAKA- 590014

In partial fulfilment of the completion of Eighth semester

Bachelor of Engineering

in

Information Science and Engineering

By

DIKSHIT KOTIAN	4AL17IS014
T K HARSHITH PRASAD	4AL17IS050
SRIHARI B	4AL17IS048
ANJALI CJ	4AL17IS007

Under the guidance of

Mr. Sharan L Pais

Assistant Professor

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

ALVA'S Education Foundation

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

2020-21

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR, MOODBIDRI D.K. -574225

KARNATAKA

ALVA'S
Education Foundation

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that the project entitled **"Sign Language Detection Using Convolutional Neural Network"** has been successfully completed by

DIKSHIT KOTIAN	4AL17IS014
T.K HARSHITH PRASAD	4AL17IS050
SRIHARI B	4AL17IS048
ANJALI CJ	4AL17IS007

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 2020–21. 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.

Mr. Sharan L Pais Assistant Professor Project Guide	Prof. Sudheer Shetty Associate Professor HOD ISE	Dr. Peter Fernandes Principal PRINCIPAL Alva's Institute of Engg. & Technology, Mijar, MOODBIDRI - 574 225, D.K

Name of the Examiners

1. Sharan L. Pais
2. Nagesh. V.B

Signature with Date

Sharan 14/8/21

ABSTRACT

Sign language and spoken language, both are generated from the same human brain, but their linguistic and physical transmission varies greatly from each other. Sign language is an indispensable communication means for deaf-mute people because of their hearing impairment. At present, sign language is not popular communications method among hearing people, hence most of the hearing are not willing to have a talk with the deaf-mute.

Persons having hearing and speaking impairment are often incapable of communicating their statements appropriately. So, they use sign language to communicate with each other and with the rest of the world. As a result, sign language recognition (SLR) has become one of the most interesting topics in computer vision and machine learning recently. Researchers are trying to improve this language to use in a large-scale though it is not an international language

This report documents the implementation of Sign Language Recognition (SLR) system, which aims to translate sign language into text from the image input given to it. Using the sign language recognition system, the deaf and dumb people would be able to communicate by their natural form of communication which would then be converted into its respective text so that it would be understood by the non-signers. This system would make the life of deaf-mute people much easier by allowing them to communicate without any restrictions and lead a normal life like others.