

# Indian Sign Language Recognition System for Differently Abled (Hearing and Speech Impaired)

*Project report submitted to the Amrita Vishwa Vidyapeetham in partial  
fulfilment of the requirement for the Degree of*

**BACHELOR of TECHNOLOGY**

**in**

**COMPUTER SCIENCE AND ENGINEERING**

*Submitted by*

**Rachabattuni Srikar AM.EN.U4AIE19051**



**AMRITA SCHOOL OF COMPUTING  
AMRITA VISHWA VIDYAPEETHAM  
(Estd. U/S 3 of the UGC Act 1956)  
AMRITAPURI CAMPUS  
KOLLAM -690525**

**MARCH 2023**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
AMRITA VISHWA VIDYAPEETHAM  
(Estd. U/S 3 of the UGC Act 1956)  
Amritapuri Campus  
Kollam -690525



## BONAFIDE CERTIFICATE

This is to certify that the project report entitled "**Indian Sign Language Recognition System for Differently Abled (Hearing and Speech Impaired)**" submitted by **Rachabattuni Srikar(AM.EN.U4AIE19051)**, in partial fulfillment of the requirements for the award of Degree of Bachelor of Technology in Artificial Intelligence Engineering from Amrita Vishwa Vidyapeetham, is a bonafide record of the work carried out by them under my guidance and supervision at Amrita School of Computing, Amritapuri during Semester 8 of the academic year 2022-2023.

Dr. Geetha M  
Project Guide

Ajila S Babu  
Project Coordinator

Dr. Prema Nedungadi  
Chairperson  
Dept. of Computer Science & Engineering

Reviewer

Place : Amritapuri  
Date : 12-05-2023

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

AMRITA VISHWA VIDYAPEETHAM

(Estd. U/S 3 of the UGC Act 1956)

Amritapuri Campus

Kollam -690525



## DECLARATION

We, **Rachabattuni Srikar**(AM.EN.U4AIE19051) hereby declare that this project entitled "**Indian Sign Language Recognition System for Differently Abled (Hearing and Speech Impaired)**" is a record of the original work done by us under the guidance of **Dr. Geetha M**, Dept. of Computer Science and Engineering, Amrita Vishwa Vidyapeetham, that this work has not formed the basis for any degree/diploma/associationship/fellowship or similar awards to any candidate in any university to the best of our knowledge.

Place : Amritapuri

Date : 12-05-2023

Signature of the student

Signature of the Project Guide

## Acknowledgements

We would like to extend our hearty gratitude and thank our project guide, Dr. Geetha M who has constantly supported us at all times during our research and assisted us by stimulating suggestions when we had run into troubles during this project. This course and project wouldn't have been possible without her constant guidance and support. We also sincerely thank our university and our Course Advisor Dr. Gopakumar G for introducing, teaching and keeping us updated about the advancements in the field of AI and in the form of a very perfectly designed course where we learn the basics and advanced applications of the systems and models in real life. Their insights and expertise were crucial in helping me overcome challenges and achieve the goals of the project. I would also like to acknowledge the support and coordination of our project coordinator, Ajila S Babu, whose assistance and encouragement was invaluable in making this project a success.