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**(Deemed to be University)**

Submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering Degree in

Computer Science and Engineering

By

**BAPANAPALLI TARUN SAI KUMAR (REGNO.36110146)**



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**SCHOOL OF COMPUTING**

**SATHYABAMA**

**INSTITUTE OF SCIENCE AND TECHNOLOGY**

**(DEEMED TO BE UNIVERSITY)**

**Accredited with Grade “A” by NAAC**

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**BONAFIDE CERTIFICATE**

This is to certify that this Project Report is the Bonafide work of **BAPANAPALLI TARUN SAI KUMAR (RegNo.36110146)** and who carried out the project entitled **“SIGN LANGUAGE APPLICATION”** under a certified course.

**Internal Guide**

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**Submitted for Viva-voce Examination held on:**

**Internal Examiner External Examiner**

**DECLARATION**

I **BAPANAPALLI TARUN SAI KUMAR (Reg.No.36110146)** hereby declare that the Project Report entitled **“SIGN LANGUAGE APPLICATION”** done by me under the guidance of **Mrs. MERCY PAUL SELVAN, M.E., Ph.D.,** is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering degree in Computer Science and Engineering.

**DATE:**

**PLACE: SIGNATURE OF THE CANDIDATE**

**ACKNOWLEDGEMENT**

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**ABSTRACT**

This application helps the deaf and dumb person to communicate with the rest of the world using sign language. Communication plays an important role for human beings. Communication is treated as a life skill. Keeping these important words in mind we present this project to mainly focus on aiding the speech impaired and paralyzed patients. Our work helps in improving the communication with the deaf and dumb. Speech-to-sign technology and VRS enables audible language translation on smart phones with signing and application has characters feature in mobile without dialling number uses a technology that translates spoken and written words into sign language with video. Interaction between normal people with blind person is very difficult because of communication problems. There are many applications available in the market to help the blind people to interact with the world. Voice-based email and chatting systems are available to communicate with each other by blinds. This helps to interact with persons by blind people. This application includes a voice based, text based and video based interaction approach. Video chat technology continues to improve and one day may be the preferred means of mobile communication among the deaf. Technologies not mashed up to solve the problem of mobile sign language translation in daily life activities. Deaf people could gesture sign language into smart phone by using VRS which would produce audible and textual output. Mobile gesture recognition might enable the deaf to converse with the hearing, remotely and intermediated by a video interpreter. Video interpreter is responsible for helping deaf or hearing impaired individuals understand what is being said in a variety of situations. The main feature of this work is that it can be used to learn sign language and to provide sign language translation of video for people with hearing impairment.

**LIST OF ABBREV****ATIONS**

ACRONYM EXPANSION

**GPS GLOBAL POSITIONING SYSTEM**

**API APPLICATION PROGRAM INTERFACE**

**JSP JAVA SERVER PAGES**

**HTML HYPER TEXT MARKUP LANGUAGE**

**JVM JAVA VIRTUAL MACHINE**

**GNU GNU’S NOT UNIX**

**OS OPERATING SYSTEM**

**SDK SOFTWARE DEVELOPMENT KIT**

**XML FULL EXTENSIBLE MARKUP LANGUAGE**

**DVR DIGITAL VIDEO RECORDER**

**OHA OPEN HANDSET ALLIANCE**

**UI USER INTERFACE**

**DDMS DALVIK DEBUG MONITOR SERVICE**

**AAPT ANDROID ASSET PACKAGING TOOL**

**ADB ANDROID DEBUG BRIDGE**

**JSDK JAVA SERVER DEVELOPMENT KIT**

**PHP PERSONAL HOME PAGE**

**CGI COMMON GATEWAY INTERFACE**

**WAR WEB APPLICATION RESOURCE**

**JWS JAVA WEB SERVER**

**LWS LITE WEG SERVER**

**IIS INTERNET INFORMATION SERVER**

**IBM INTERNATIONAL BUSSINESS MACHINES**

**URL UNIFORM RESOURCE LOCATOR**

**APK ANDROID PACKAGE KIT**

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