MARRI LAXMAN REDDY GROUP OF INSTITUTIONS

MLR Institute of Technology
Laxma Reddy Avenue, Dundigal, Quthbullapur (M),
Hyderabad – 500 043
Phone Nos: 08418 – 204066 / 204088, Fax : 08418 – 204088

MAJOR PROJECT ABSTRACT

Title of Idea	Implementation of CNN-based Word Recognition System
Theme	Project for Deaf and Dumb people
Description	Sign language is used by deaf and hard hearing people to exchange information between their own community and other people. Computer recognition of Sign language deals from Sign gesture acquisition and continues till text/speech generation. However static gesture recognition is simpler than dynamic gesture recognition but both recognition systems are important to the human community. However, most people do not know the sign language. In this project, we develop a multilingual sign language approach, where hand movement modeling is also done with target sign language independent data by derivation of hand movement subunits. However, hand tracking and gesture recognition play an important role in human-computer-interaction (HCI). For the advancement of HCI, we can achieve human expression by recognizing the gesture, which can reduce the impassivity among the deaf and common people. Over the years, different approaches have evolved for sign language recognition using different machine learning techniques such as, hidden Markov models (HMM), parallel HMM, relevance vector machines, boosting, sequential pattern trees, deep learning methods. We can develop this by TDNN, CNN, DNN. Despite these advances, sign language recognition technology is still an emerging technology. We analyses the performance of proposed methods through the investigation on own generated/standard dataset.

S. No	Student Name	Roll Number	Class/Section	Phone number	Sign
1.	B. Sai Kiran	19R21A0462	ECE – B	7013359686	
2.	B. Shashanth	19R21A0463	ECE – B	7075502027	
3.	O. Pradeep	19R21A0497	ECE – B	8367456826	
4.	Satya Prakash Dash	19R21A04B0	ECE – B	8790129174	

PROJECT GUIDE: Dr. BITTU KUMAR **PROJECT COORDINATOR: Dr. T. S. Arulananth**