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Sign Language Detection in Voice Output

Nitin Barsagde¹, Ajay Deshmukh², Himanshu Nikhare³, Snowbee Singh Brar⁴, RoshanParaskar⁵, Sushant Barve⁶, Mansi Meshram⁷

> Professor, Department of Computer Science and Engineering¹ Student, Department of Computer Science and Engineering^{2,3,4,5,6,7} GH Raisoni Academy of Engineering and Technology, Nagpur, India

Abstract: This Sign language detection is the process of recognizing and interpreting gestures, symbols, and movements used in sign language. This technology is significant in enabling communication between individuals who are deaf or hard of hearing and those who do not know sign language. Sign language detection uses video data analysis and identifies specific features such as hand and arm movements, facial expressions, and body language. Machine learning techniques, specifically convolutional neural networks, are used to recognize and classify specific signs and gestures with an accuracy rate of 80-90%. To enhance the system's usability, the policy should include record and history tabs. Additionally, the dataset can be modified to suit different sign languages. Overall, this technology offers immense potential for education and communication for individuals with hearing impairments.

Keywords: Sign Language Detection, Recognition, Interpretation, Gestures, Symbols, Movements, Technology, Communication, Deaf, Hard Of Hearing

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