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Hand Sign to Text Converter

Dr. P. C. Latane¹, Ashwini Dalvi², Ajay Jagdale³, Pratiksha Ghosale⁴, Ritesh Zaware⁵

Assistant Professor, Department of Information Technology¹
Students, Department of Information Technology^{2,3,4,5}
Sinhgad Institute of Technology, Lonavala, Maharashtra, India

Abstract: Voice and Language are the main things that help humans to communicate with each other. Due to hearing ability, we can understand the thoughts of each other. Nowadays, we can give commands using voice recognition. But what if one cannot hear anything and eventually cannot speak? So, Sign Language is the principal communication tool for hard of hearing and mute people and to ensure an independent life for them. The automatic interpretation of sign language is an extensive research area. With image processing and artificial intelligence, many techniques and algorithms are in this area. Every sign language recognition system is trained to recognize the signs and convert them into the required patterns. The proposed system aims to provide speech to the speechless. In this project, the double-handed Indian Sign Language was captured as a series of images, then processed with the help of Python, and then converted to speech and text.

Keywords: Sign Language Recognition, Automatic Interpretation, Image Processing, Artificial Intelligence, Speech-to-Text Conversion

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