

SINHALA SIGN LANGUAGE TRANSLATOR USING A 3D MODEL AVATAR

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Abstract

A language is a form of words or signs used by individuals to communicate emotions and thoughts with one another. There is a problem with communicating between hearing-impaired people and general individuals in the face of culture. Some people do not know sign languages, and they do not incline to study sign languages. Thus, hearing-impaireders are usually unknown to them. There is an absence of an application for Sinhala Sign Language when evaluating all the solutions. Mobile technology plays a superior role in the everyday life of the modern era. The proposed application is a mobile solution where users can widely reach. By using this solution, the hearing-impaired user will be able to use the 3D model avatar to understand what normal people say and the normal people will be able to use the voice recognition mechanism to understand what hearing-impaired people say. This is a good solution to fight off communication defects as well as to close the digital gap within society.

Keywords: Hearing-impaireders, Sinhala Sign Language, 3D model avatar, Voice recognition, Convolutional Neural Network.