

Hand Gesture Recognition and Voice Conversion System for Dumb People: Sri Lanka Military

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Communication is an important tool used by people to share ideas with each other. When dumb people want to communicate with the general public, it is evident that many problems are caused due to the language barrier. For instance, differently-abled soldiers made such after 30 years of humanitarian war do not have a proper mechanism to make their gestures identified that would make them comfortable with their day-to-day activities. This study helps to project the issues of daily activities of differently-abled soldiers who are in army bases. The study will also come up with a low-cost solution to break the communication gap of dumb soldiers. The future system will be a portable system that captures differently-abled soldiers' hand gestures (signs) and will translate them into meaningful Sinhala voice. The system is developed with a special stand using sensors and Bluetooth on top of the Android application. It is observed that the accuracy of the system is the key benefit and it will be useful when working with differently-abled soldiers.

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