Smart Phone Speaks Hand Movements

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There are about 466 million dumb around the world faced continues problems such as the inability of the dumb category to integrate and communicate with society easily, and their inability to speak for congenital or medical reasons, this project helps the dumb to speak virtually by moving his fingers with known movements for him which these movements transfer to the application installed on the smart-phone which makes the smart-phone pronounces the needed word. Local study was made to see how dumb and dumb families accept project idea. Researchers found a suitable sensors in local market which achieve the project idea so they bring 5 sensors and start to work with such as electronic circuits drivers and also its programming with the microcontroller, mobile application is connected to microcontroller to receive the words and pronounces it in five languages like (Arabic, English, French, Italian, German, Spanish) in male/female voice. The student Ahmad Salah was chosen as a virtual figure to test and simulate the project, the first run shows slow response time in pronouncing words on the smart-phone which approximately measured 700 ms. In the next run, researchers replaced the smart with high speed device which make the processing in the application more fast and the approximately time measured 310 ms . This study shows that smart gloves can help dumb around the world to communicate with other people with standard words in five languages.

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