The glove incorporates bendable sensors in each finger which track the position of each finger | Photo source Wulala Technology Company

Innovation > Computing & Tech > First sign language glove for mass production

FIRST SIGN LANGUAGE GLOVE FOR MASS PRODUCTION

COMPUTING & TECH

A startup is developing a glove that translates sign language into spoken words to be mass produced

Spotted: Although researchers have previously worked to develop smart gloves that can translate the sign language of the wearer into spoken language, there is yet to be a mass-produced, easy-to-use version that could be widely applicable. China's Wulala Technology company hopes to change this with their Sign Language Translation Glove. The glove would be worn by a sign-language user and would allow them to communicate more easily with the non-hearing impaired.

The glove incorporates bendable sensors in each finger that track the position of each finger. At the same time, a sensor in the palm tracks the movement and position of the glove in three-dimensional space. The glove uses Bluetooth to pair to an app that translates the movements into both on-screen text and synthesised speech. The hearing person can then speak their response and this will be displayed as text or as sign language performed by an animated avatar.

While initially designed to interpret Chinese sign language, Wulala is also working on added other sign languages. This could not only allow deaf people to communicate with deaf people who sign in another language, but it could also be used to translate say, Chinese sign language into English spoken language – acting as a universal translator.

Wulala has launched a Kickstarter campaign to raise funds for the development of the glove. They claim that the glove can also adapt to individual styles of signing and will not only, "teach you the sign languages of varied countries, but also study your sign language habits. Our innovative glove can recognise 95 per cent or more sign languages from different countries or regions and will even learn personal sign language habits."

This is not the first smart device we have seen aimed at helping the hearing impaired communicate with others. Springwise has previously looked at an automated system that translates between sign language and English, and an app that enables sign language users to communicate with Alexa. However, this one may be the most wide-ranging and practical.

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Takeaway:

While the deaf community around the world have developed a number of rich linguistic systems, many deaf or hearing-impaired people still face significant barriers in communicating with those of full-hearing in everyday life. If successful, this glove could help to remove some of those barriers, while at the same time making it much easier to communicate in person with deaf people who sign in other languages. According to Wulala, the glove is already in use in China, where it has a 95 per cent accuracy rate in recognising around 8,000 Chinese sign language words. They hope to eventually make the glove available for a retail price of around $3,000 (€2,570).