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App helps blind to send text messages



The system will be open source and free to download on iOS and Android.

New technology to help blind people text using touch screen mobile devices has been developed.

Researchers at Georgia Tech produced the app - to be made available on Apple and Android devices - based on the Braille writing system.

It is claimed typing with the app is up to six times faster than existing methods for texting without sight.

Access to technology for the visually-impaired is a growing issue due to the proliferation of touch screens.

Experts say currently available tools, such as Apple's Voiceover technology, are functional but too slow to be used effectively.

Brailletouch, which the team hope to release in the next couple of weeks, uses a system that is controlled with six fingers and, crucially, does not **require any movement of the hands**.

"Users who know how to type Braille well never move their hands," explained Mario Romero, lead researcher on the project.

"When users hold the phone they hold the phone with the screen facing away from them in landscape mode.

"They wrap the index, middle and ring finger in each hand around the phone.

"It's not like the Qwerty keyboard where you move up and down. That's why this thing works - we can get away with only six keys."

Eyes-free kit

Brailletouch will be free and open-source, its makers say, and it is hoped it could even become an "eyes-free" solution for fully-sighted people who want to text while visually pre-occupied with something else.

"Learning to type Braille is learning to memorise where the dots fall," Mr Romero told the BBC.

"It took me and my colleagues a few hours to memorise things so we could start typing at around 10 words per minute. It's not something that takes years.

"We're hoping that, if not Braille, a similar system may solve the issue of having too many keys that are too small that force everybody to look at the screen when they're typing."

However, Mr Romero was quick to dampen any possible hopes that the software could be used to text while behind the wheel.

"They need to concentrate on what they're doing. This is not for texting and driving," he said.

'Truly blind'

Mr Romero highlighted a growing anxiety shared among the blind community that the widespread adoption of touch screens for many machines and devices is making them "truly blind".

"There is extreme concern about this new trend.

"A lot of equipment today - from copying machines to machines at the gym - is all coming with touch screens."

He added that while research into tactile screens - which give users feedback by moulding - is taking place, we are still some way from having touch screens which adequately cater for the visually-impaired.

"Blind people say I 'see' things with my fingers," Mr Romero said.

"But on touch screens they are truly blind."