HAPTIC PROXIMITY MODULE

‘Low vision’ (LV) is a common form of vision impairment that involves irreversible vision loss, significantly reduced vision but not total blindness and hence still usable vision, which affects 246 million people globally.

The project developed an open-source haptic proximity module (HPM) costing approximately $100, which can enable LV users to engage with their direct environment through vibration feedback as a measure of closeness. This endeavor contributed to the discourse on wearable assistive technology while incorporating off-the-shelf components to create an accessible open source device.

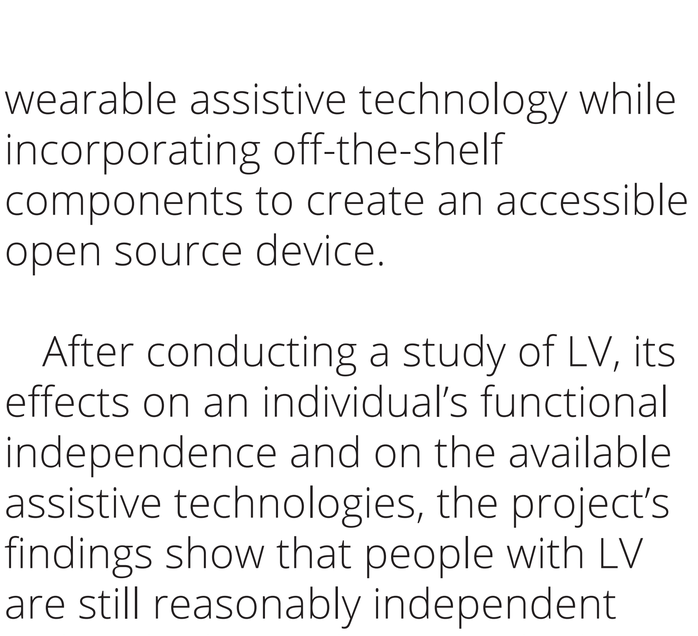
After conducting a study of LV, its effects on an individual’s functional independence and on the available assistive technologies, the project’s findings show that people with LV are still reasonably independent within the home, but outside the home this independence begins to deteriorate due to a lack of vision assistance. The available products are expensive and narrow in application. Hence there is a lack of cheap and readily available haptic devices that could extend a LV user’s perception of their immediate surroundings.

This project explored how these findings can be used within a design process to achieve the outcome of improving the functional independence of the LV population within their surroundings through the design of a low cost HPM, shared through an open source network.

HERE’S ONE YOU CAN MAKE YOURSELF!

for full instructions please visit...

http://www.instructables.com/id/Haptic-Proximity-Module-HPM-for-Low-Vision-users



INTERACTIVE SYSTEMS

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