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AI-POWERED WEARABLE IDENTIFIES TEXT AND PEOPLE FOR THE VISUALLY IMPAIRED

 SPORT & FITNESS

An updated version of a popular assistive technology device uses AI to read printed text and distinguish faces for users with limited vision.

Four years ago we covered the [OrCam](#) headset, a device that helps the visually impaired. The OrCam mounts onto any pair of glasses and can detect things in a wearers field of view. The wearer points at objects, text, or people they want to identify and the OrCam provides the information in audio form using bone conduction. Now, the company has introduced the [OrCam MyEye 2.0](#) – a vast improvement on the original, ground-breaking device.

The original device was the size of a smartphone and used a separate head unit and base unit, connected with a wire. The new version is compact and wireless. The new MyEye has been reduced to about a tenth of the size and weight of the original and is entirely self-contained. It also incorporates improved AI-powered computer vision and machine learning. This enables it to read computer screens and printed text, such as books, product labels, and menus. It can also identify currency and can translate text into different languages. The device responds to intuitive gestures, so users simply need point to the piece of text they want read, and hold out their hand to stop the audio. The text-to-speech is available in 15 languages.

MyEye can also now scan barcodes to recognise products. It comes with a preloaded database containing hundreds of thousands of barcodes. Other unique functions include colour identification and telling the time when users lift their wrists as though looking at a watch. It also incorporates a facial recognition algorithm that can be trained to recognise people standing in front of the wearer.

The MyEye 2.0 sells for around USD 3,500, around the price of a mid-range hearing aid. The glasses-mounted wearable competes in a market slowly dominated by a range of cheap and free app such Microsoft's Seeing AI app, which also translates the visual world into an audible experiences. According to users, MyEye 2.0 is ahead of the game with the speed of its new AI engine, which does all the work and take less than 30 seconds to programme in a face.

It joins a range of innovative devices aimed at helping those with disabilities, including a system that **translates** between sign language and English and a **navigation app** to help those with blindness. With software and hardware moving at a very rapid pace, will OrCam be able to create a sustainable and long-lasting solution?

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