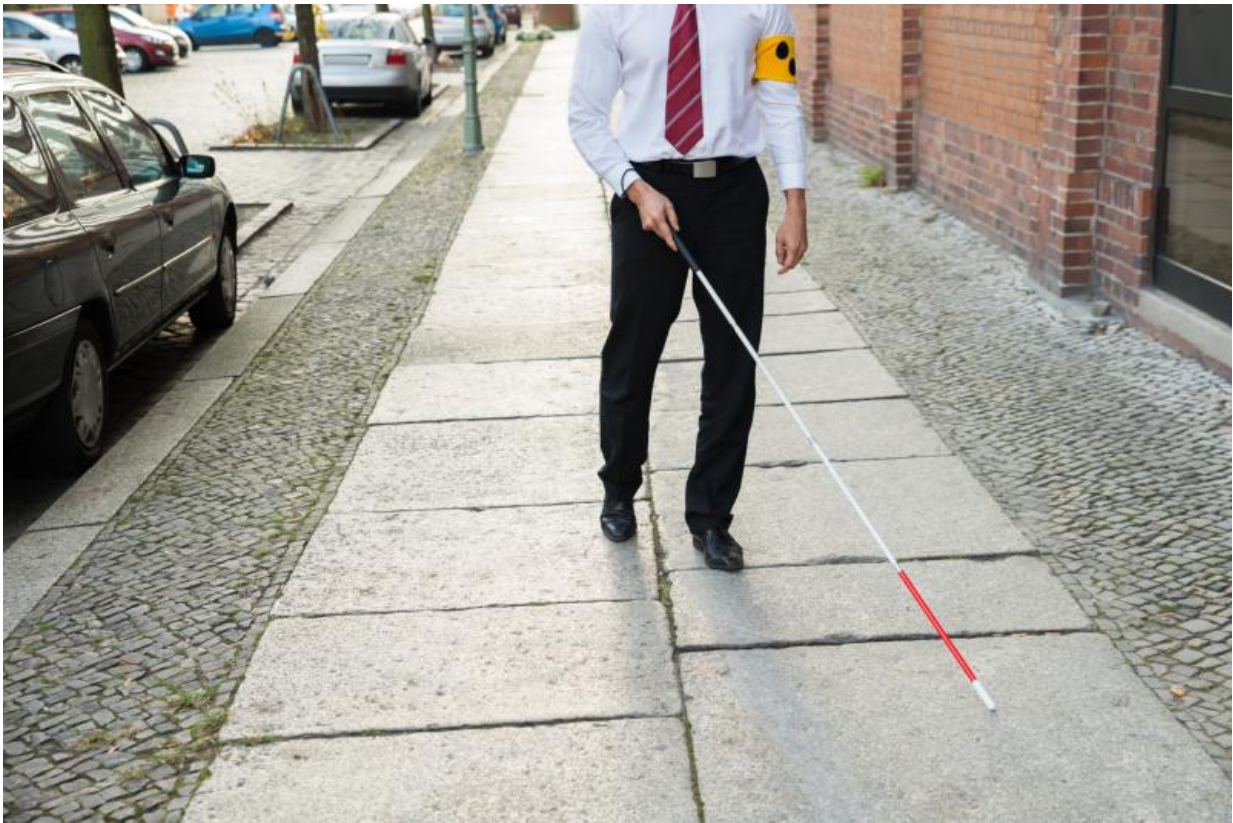


A pioneering facial recognition cane for the blind

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Blind cane user

A revolutionary 'smart' cane enabling the visually impaired to instantly identify friends and family could be available soon, thanks to students at Birmingham City University.

The 'XploR' mobility cane, being developed by ICT [students](#) Steve Adigbo, Waheed Rafiq and Richard Howlett, uses smartphone technology to recognise [familiar faces](#) from up to 10m away. The cane also features GPS functionality to aid navigation.

The device has added importance for one of its developers, Steve Adigbo, whose grandfather is blind. Steve said: "My grandfather is blind and I know how useful this device could be for him. The smart cane incorporates [facial recognition technology](#) to alert the user when they are approaching a relative or friend. There's nothing else out there like this at the moment."

The Birmingham City University team have already presented the XploR cane to medical and science professionals in Luxembourg and France, and plan to visit organisations in Germany later this year.

"Medical and healthcare companies in France really liked the product. Hopefully it'll be making a real difference to people's lives soon", said Waheed.

The students have designed the XploR cane to detect faces up to 10 metres away, vibrating when detecting a recognisable individual from a bank of images stored on an internal SD memory card.

The device will guide users towards friends and family members using an ear piece and audio guidance, with the information being relayed through bluetooth technology.

The students conducted market research at the Beacon Centre for the Blind in Wolverhampton, West Midlands, to determine key features that the visually impaired would find useful in a mobility cane.

"We found that high-spec technology features were essential

requirements for users, as well as the cane needing to be fairly lightweight and easy to use", said Waheed.

"We'll be returning to the Beacon Centre later this year for people to test the product and also to highlight the training and security [features](#) of the cane."

Provided by Birmingham City University

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