



The band's basic instructions are left, right, forward and an emergency stop alert | Photo source [Alvaro Millan](#)

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HAPTIC ARMBAND AIDS NAVIGATION FOR THOSE WITH SENSORIAL DISABILITIES

 HEALTH & WELLBEING

The band guides users to a destination without the need to continually check a screen

Spotted: Sensory technology company Tuso Haptics's first product is the Aro haptic band, which is designed to help people with sensorial disabilities navigate city streets. Designer Alvaro Millan Estepa launched the startup after an encounter with a blind skateboarder, and the band has proven so successful it is now being developed for use by fully-sighted people when driving, whether that be on a scooter, a motorbike, car or bicycle.

Made from recycled materials and co-designed with people who have little or no sight, Aro's alerts feel like soft vibrations. The band's basic instructions are left, right, forward and an emergency stop alert. The vibrations vary in frequency, intensity and location in order to provide on-the-go information. Testers used a 3D-printed map simulating typical public situations and spaces and the results were overwhelmingly positive.

The team plans to launch a crowdfunding campaign at the end of 2020 with a goal of providing the first iteration of the band in early 2021. The design will be open source, and the final version will be 3D-printed and include recycled materials as a means of keeping production costs low and accessibility high.

Other recent applications of haptic technology spotted by Springwise include finding new ways to reduce contact with public objects. [Hand-tracking software](#) allows visitors to interact with virtual museum exhibitions, and an [ultrasound system](#) produces mid-air Braille instructions.

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Takeaway:

Initial uses of haptics focused on gaming and virtual reality experiences. As the tech develops, more and more projects are finding ways of using tactile sensations to expand knowledge and solve problems. Healthcare is an example of an industry using one innovation to help develop another. Haptics help researchers monitor and test nanoscale technologies, and they also play an important part in turning ideas surrounding autonomous vehicles and drones into testable concept pieces.