GUIDE DOGS

Studies into Robot Guide Dogs and wearable technology to help people who are vision impaired

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There have been multiple efforts to come up with a technological solution to guiding, that will enable people with sight loss to get out and about on their own terms.

Take a look at the studies in these links and consider the points below:

- **www.nsk.com/company/news/2017/press0413b.html**
- **www.dailymail.co.uk/sciencetech/article-3011069/Robots-reins-replace-guide-dogs-Machines-use-tactile-sensors-vibrations-help-people-navigate.html**
- **www.rnib.org.uk/nb-online/i-am-robot-not-guide-dog**
- **www.zdnet.com/article/its-no-robot-guide-dog-but-this-wearable-aims-to-help-blind-people-move-safely**
- **www.fussfreephones.com/post/help-for-the-blind/exclusive-robot-guide-dogs**

Task

Technology Evaluation

- Evaluate the tech created by each study – in what ways are they successful? Can you find any problems with the design? What parts of the design could you apply to your guiding solution?
- What can a guide dog do that a robot guide can't?
- Is wearable tech a workable solution?

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Going against programming – making decisions using instinct

Whilst technology is certainly part of the future of mobility for people with vision impairments, there are some situations in which animal instinct can over-ride training and programming with life saving outcomes. One such instance occurred to Dave and his guide dog Quince. Guide Dogs are trained to help their owner cross the road safely and 'walk on' when instructed. One day Dave felt it was safe to cross and told Quince to 'walk on' but as they were about to step forward a speeding car rushed by and Quince pulled Dave back, saving his life. This quick thinking instinct and on the spot decision making is very difficult to programme.

We've also been told amazing stories about dogs guiding their owners to safety after they've fallen or taken ill. In the US, a guide dog jumped onto a train track and dragged its owner to safety – saving his life.

We need a dog to be able to make decisions and use their intuition – this is part of their natural instinct as animals but also part of the attachment they have to their owner. Guide Dog Owners feel a trust bond with their dogs, it's a partnership based on mutual trust, bond and friendship.

> Putting your life in the hands of a robot doesn't feel as safe as trusting a dog who you love and who loves you back and will do anything to protect you. **Guide dog owner John.**

There are also huge social and psychological benefits to having a guide dog. These include companionship and responsibility – taking care of each other and getting out about. Your robot guide won't give you puppy dog eyes if you don't take it out for a walk for a few days, but a guide dog needs you to leave the house, which means people who have guide dogs are more likely to go out, be sociable and live independent lives. Having a dog motivates them to do this more than using a piece of tech that you can easily store away.

Guide dog owners tell us that a balance is best

> A guide dog and technology are the recipe for independence and true independent travel. **Martin**

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