

Bright Line

Facts

2.2 billion people have a near or distance visual impairment.¹



Normal Vision Cataract Glaucoma Diabetic retinopathy
Types of visual impairments²

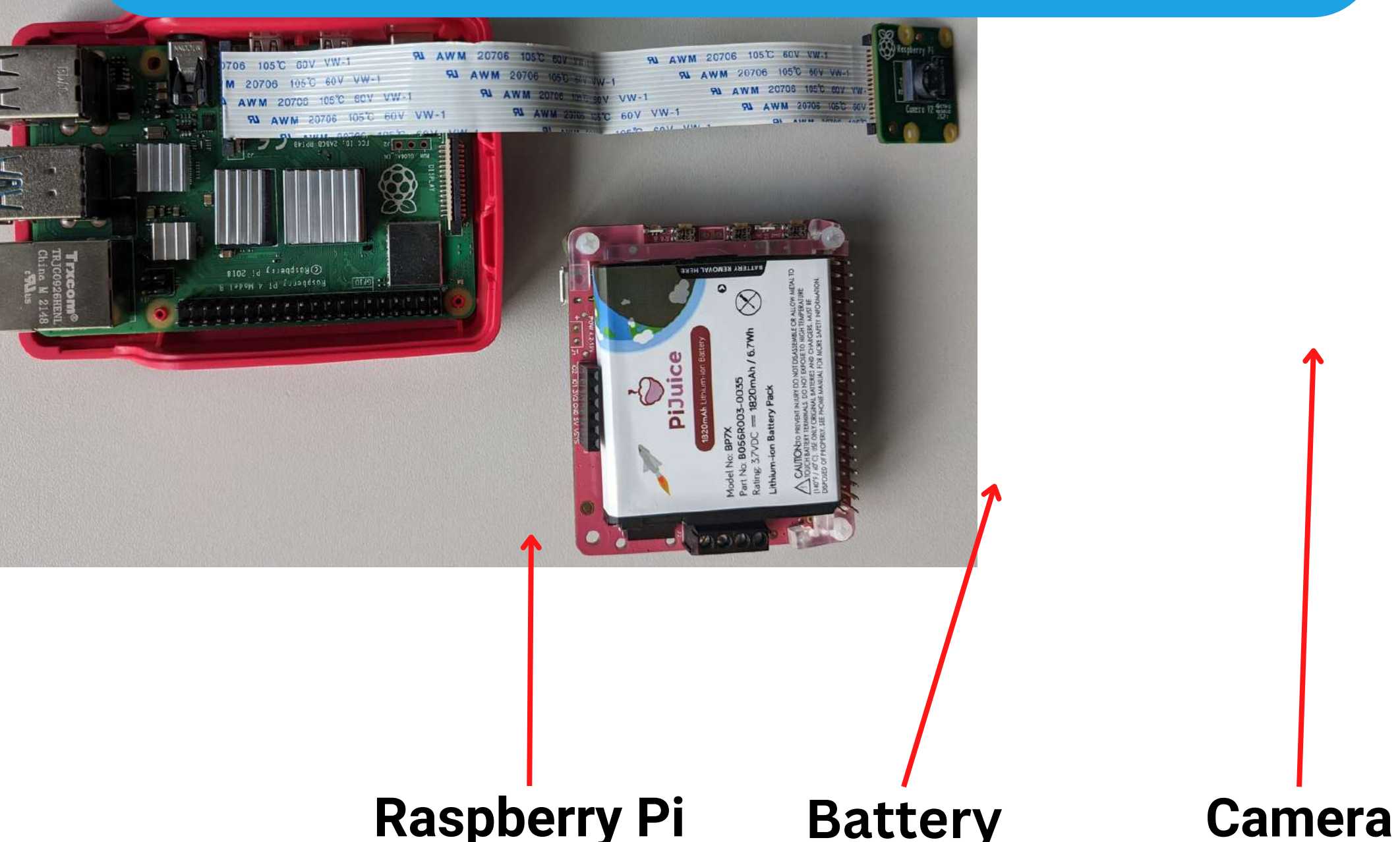
Prices:³

- Our solution: 71€
- White cane: starting from 30€
- Guiding dog: 25k€ + 200€/month
- Other electronic travel aids: from 300€ to 3000€

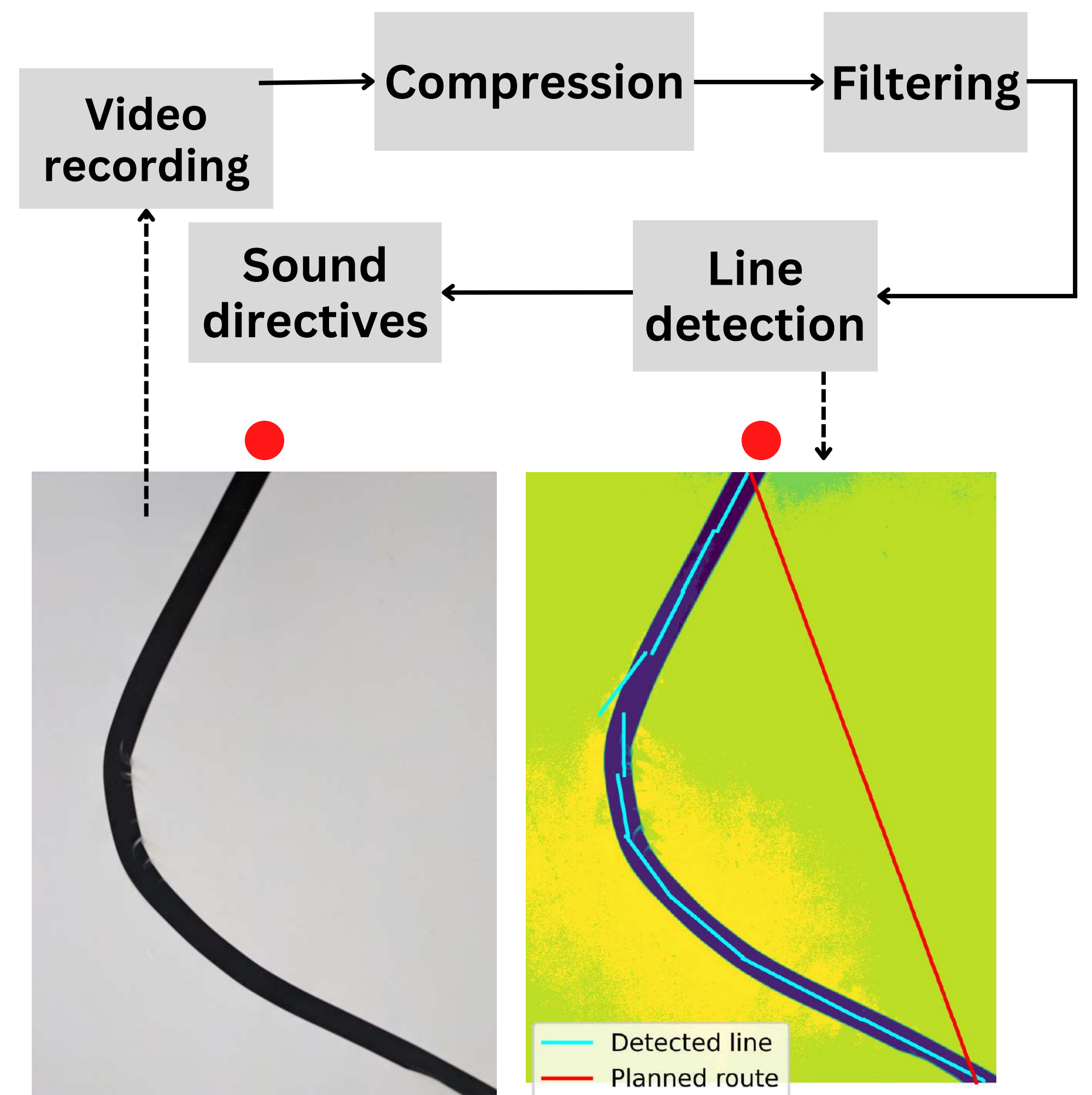
Technical challenge

Enable visually impaired people to follow a line autonomously.

Material



Methods and results



● : user's position

The length of the line is approximately 2m.

Conclusion

- Affordable and easy-to-use solution
- Environment easily adaptable and no need for extra infrastructure.
- Extendable by adding features such as detecting a line amongst others according to its color or guiding with 3D-sound.

References

- 1: <https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment>
- 2: <https://www.intechopen.com/chapters/69973>
- 3: <https://gitlab.eurecom.fr/group-a1/project-s5/-/blob/master/docs/sources.md#Prices>