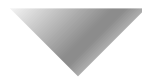


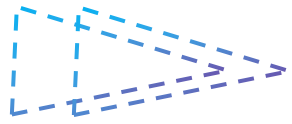


18 Nov 2021
Ruoye Wang & Jinchun Wu
present:

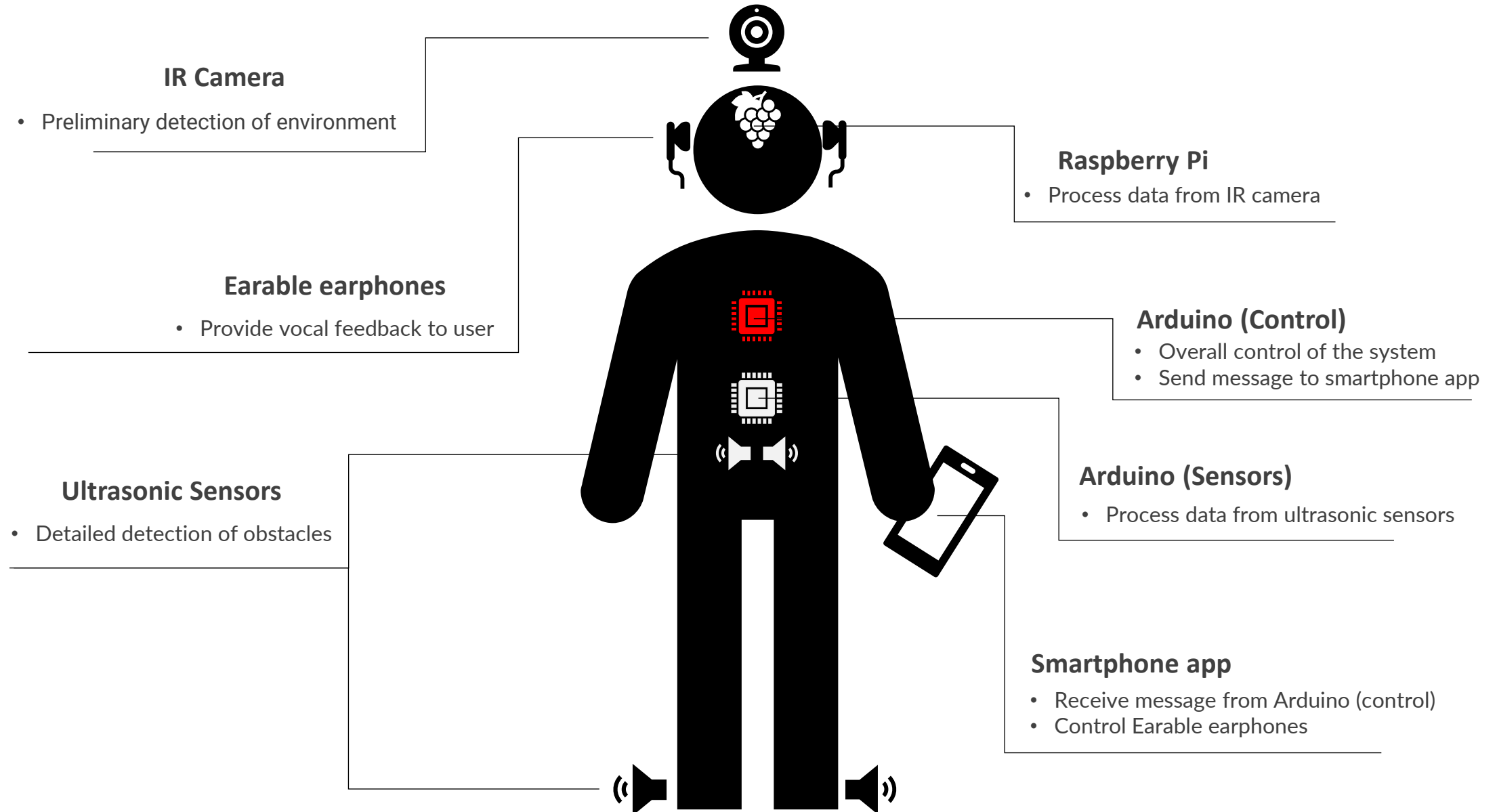


Palantir2021

Obstacle avoidance system
for the visually impaired

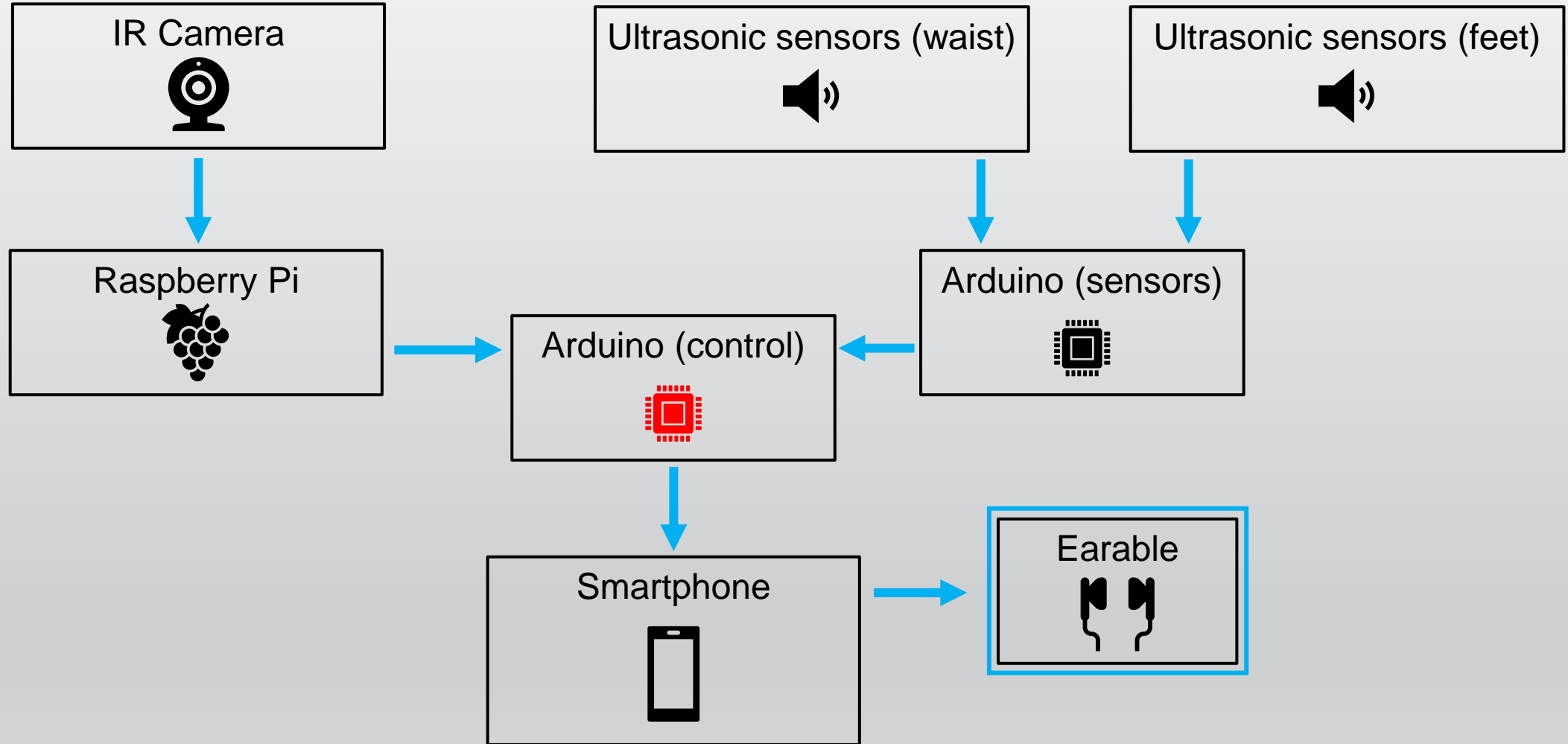


Overall Project Goals and Specific Aims



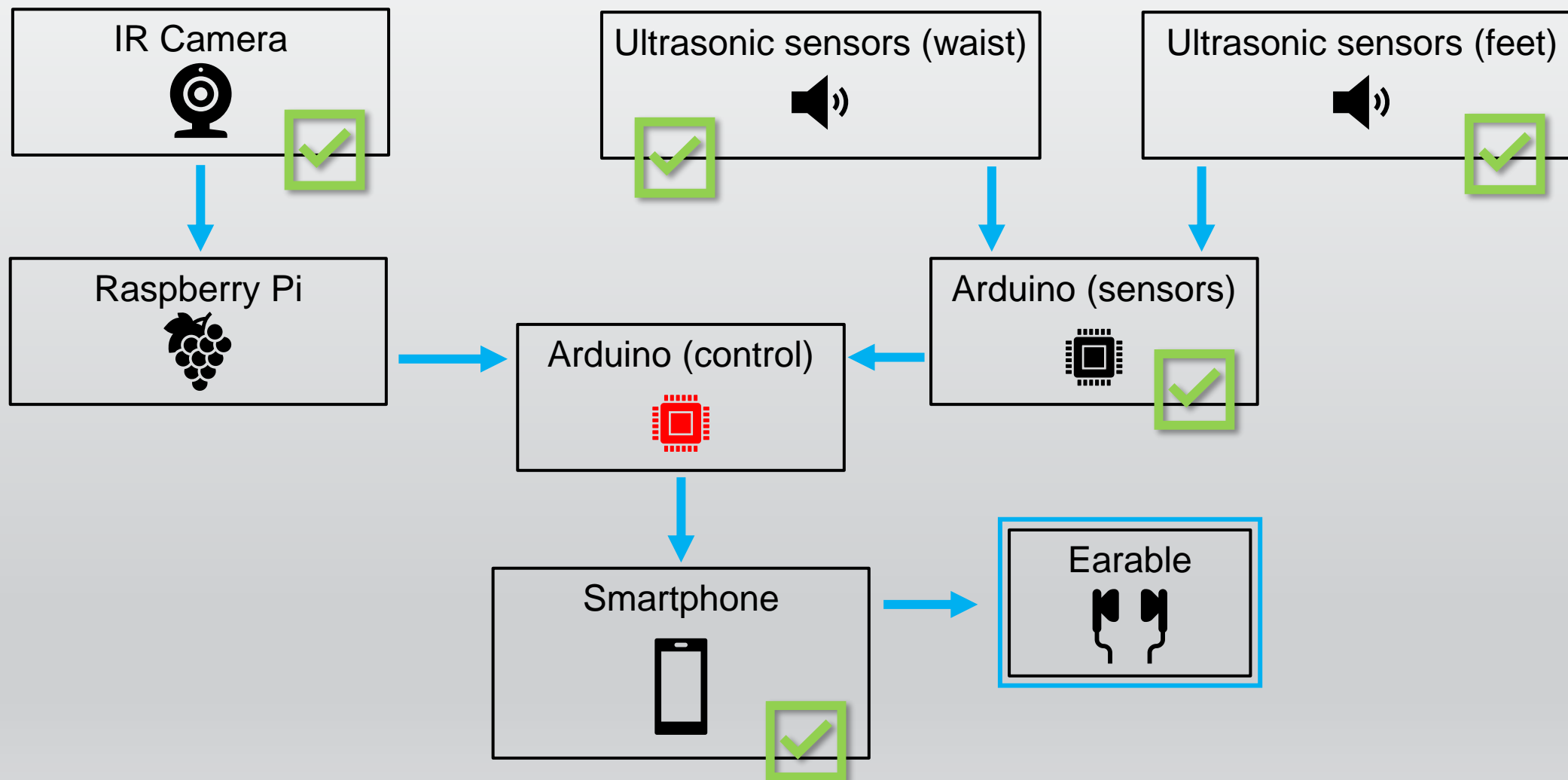


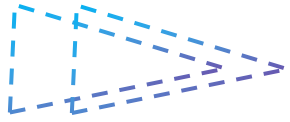
Technical Approach





Current Status





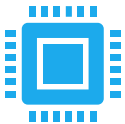
Next Steps

Devices



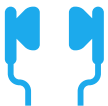
Raspberry Pi

- Establish a stable operating environment
- Fast recognition of IR camera graphs



Arduino (control)

- Overall control of RBPi and Arduino (sensors)
- Process data and send message to smartphone



Earable

- Connect to smartphone via BlueTooth
- Produce vocal feedback to user

Connect & Test



CONNECT

- Establish connections between parts



TEST

- Improve connectivity
- Guarantee Robustness



IMPROVE

- Blindfolded tests
- Enhance user experience



THANK YOU