

HANDYNAV-Haptic Smart Gloves

Our mission is to promote cycling as a form of transport by making it more accessible and safe, through lighting and navigation systems, that are noninvasive and enhance the riders experience.



TCD School of Engineering, Universal Design Innovation, Prof. Gareth J. Bennett

Group 3 Members:

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Problem: Accessibility and Safety

- Cyclists often distracted while listening to or looking at directions
- Difficult to see hand turning signals in the dark

Infographic of use



50% of our shareholders don't cycle because it is "too dangerous" survey carried out for Nov 15th 2020

Enter

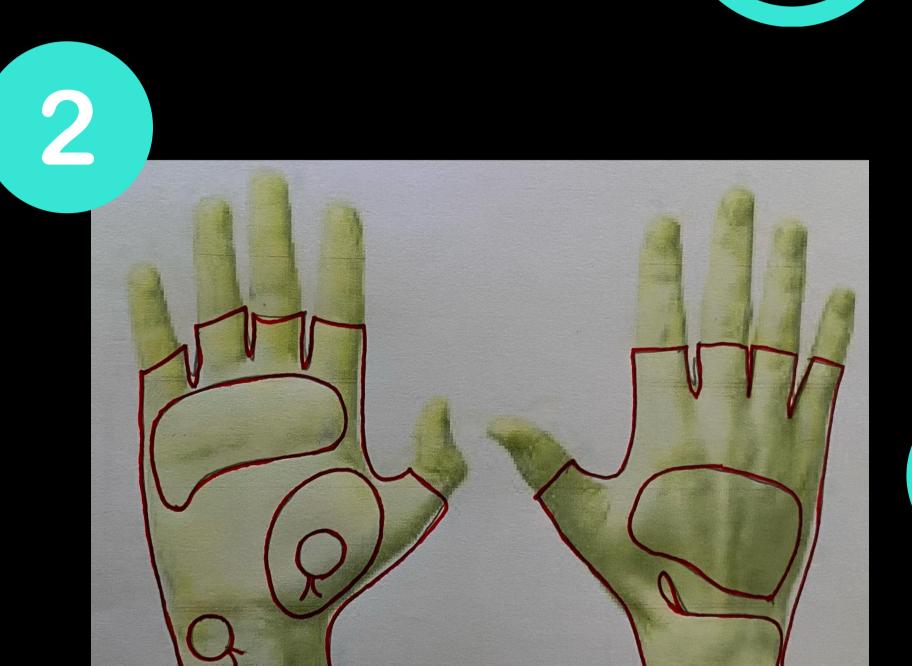
Destination

in HandyNav

app on Phone

Solution:

- Gloves that give directions through vibration pulses
- Gloves that have indicator lights



Put on Gloves

-Innovative

- -Allows cyclists to focus on the road and surrounding traffic
- -Increases cyclist visibility
- -Gloves portable and can be used by anyone
- -Signalling communicated in a more obvious way



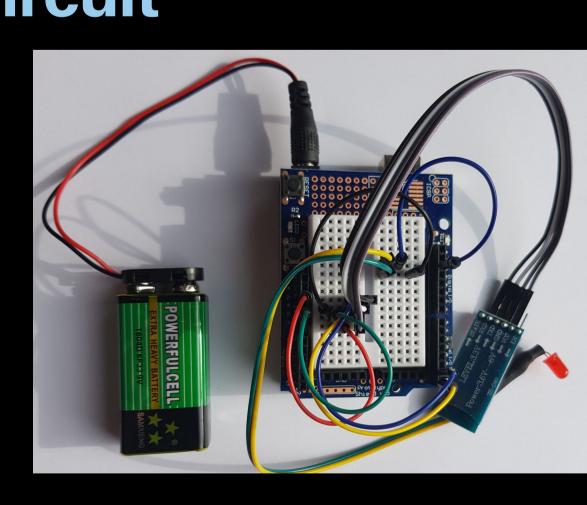
Indicator Lights on palm and back of hand on until turn completed.



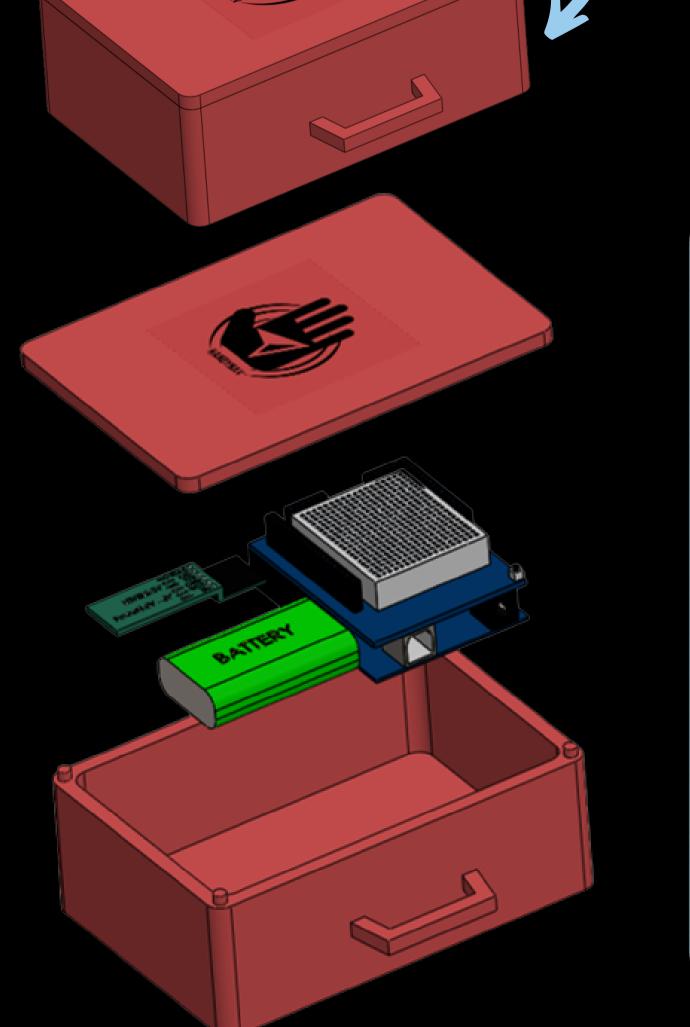
Final Prototype

HandyNav

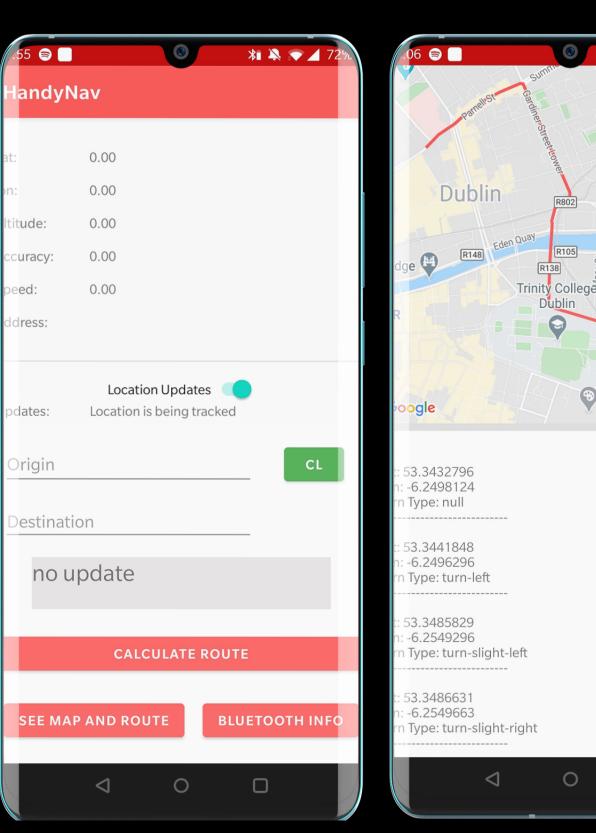


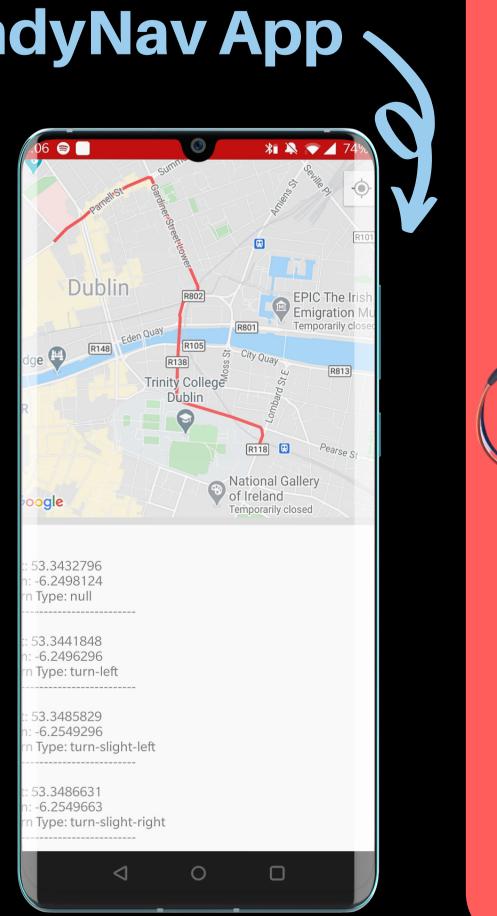


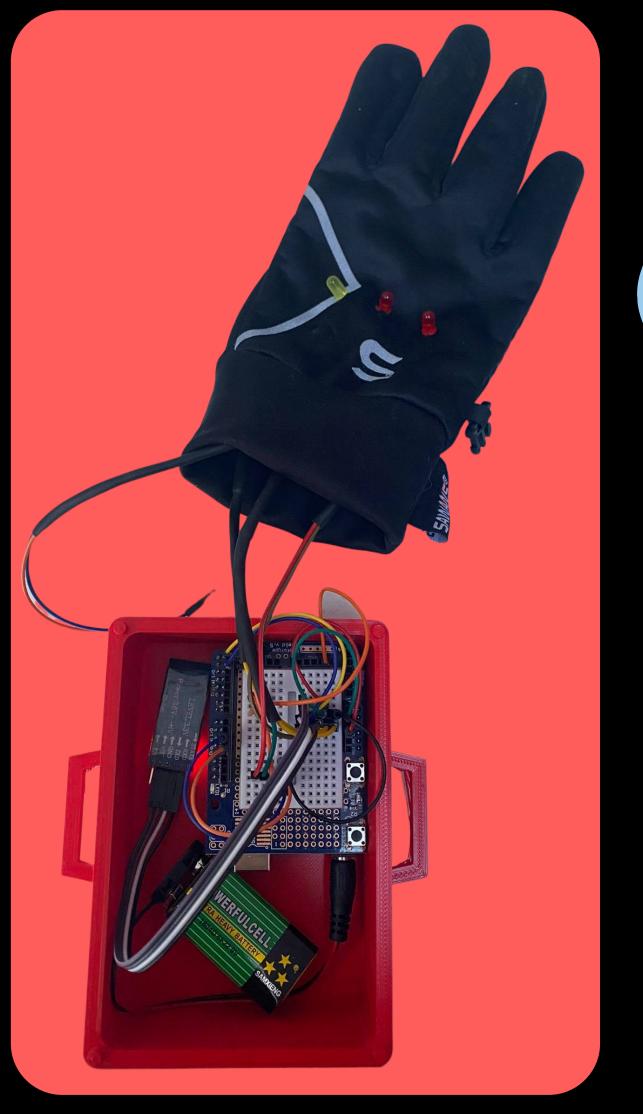
HandyNav App



Component Housing







Schematic

