

Circuit and Shape Design for Wearable Computing

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Background

- **Wearable Computing**
Apple Watch, Google Glass
- **Facioplegia**
Harmful, Bad for eyes
- **Glasses Equipments**
Help patients exercise facial muscle



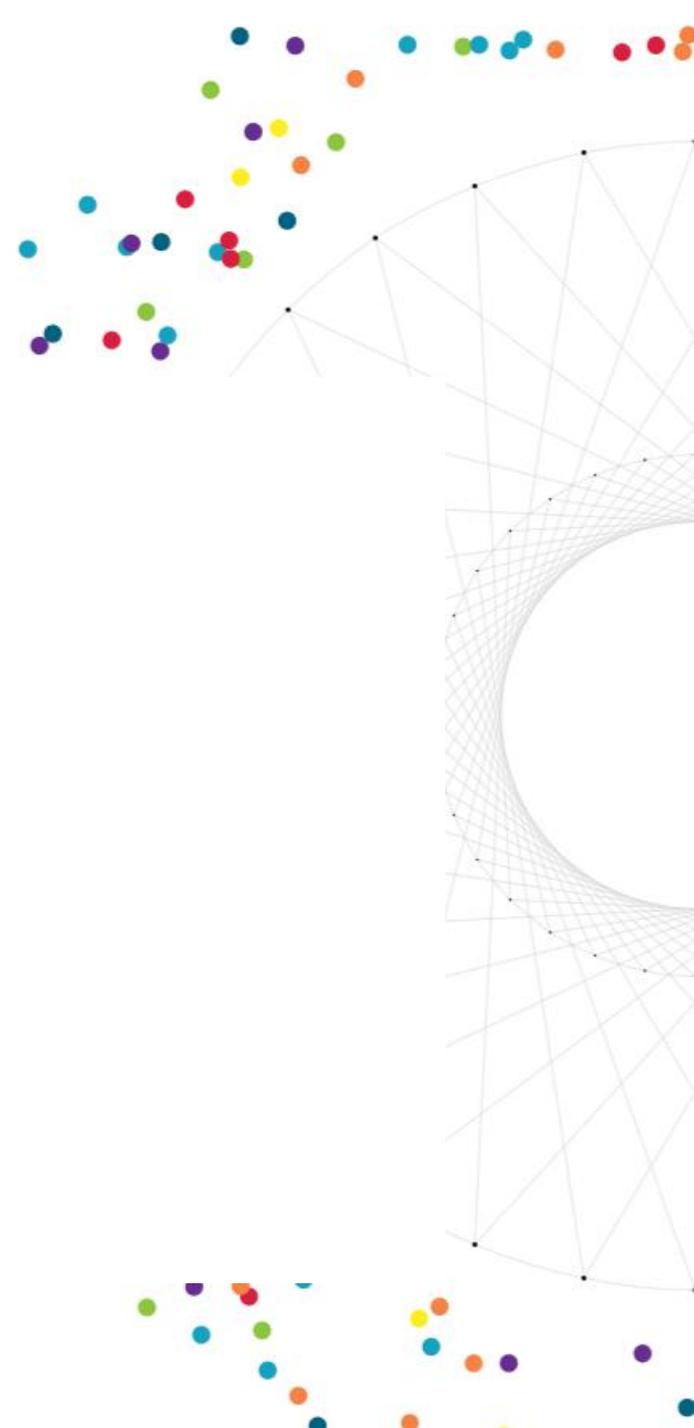
Target

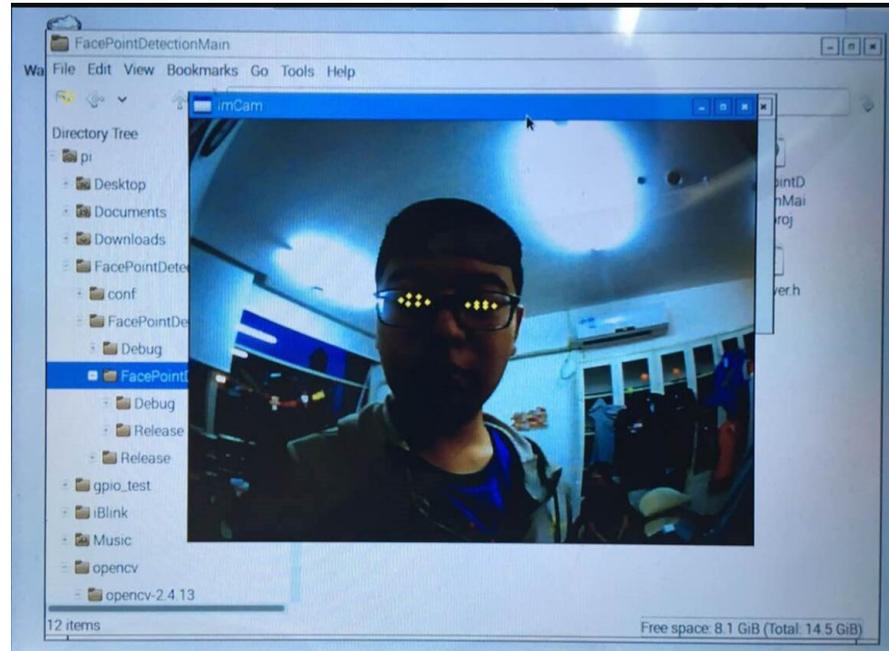
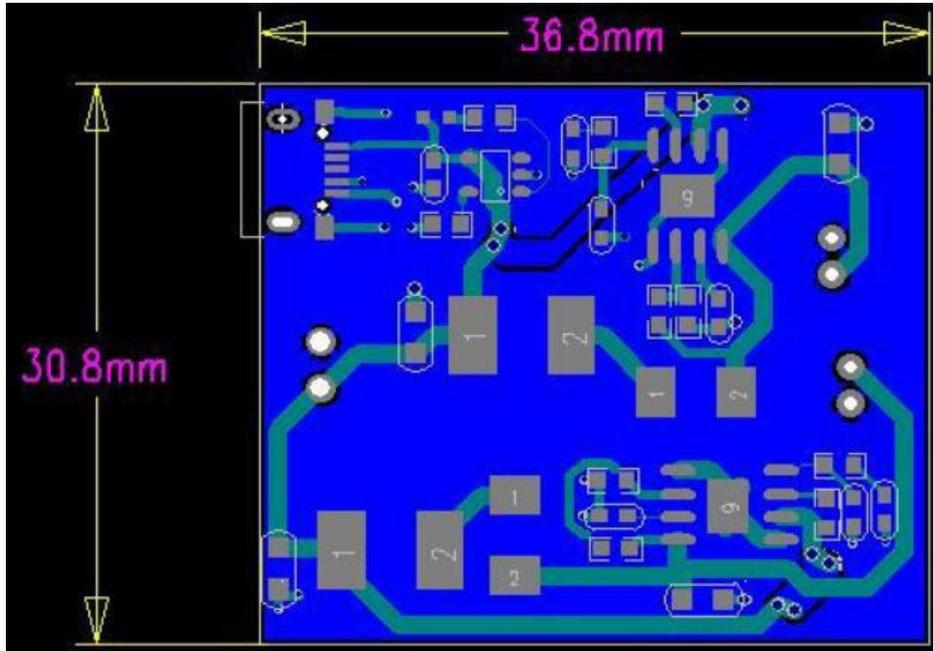
- Redesign source circuit
 - Use Raspberry Pi (5V voltage and 2A current)
 - Stimulating Circuit (7.5V or 12.5V pulse voltage)
- Select suitable camera
 - Test the distance from camera to eyes (about 5~10cm)
 - Catch the activities of eyes
- New 3D model
 - 3D print



Progress

- Redesign source circuit
 - A series circuit PCB
 - Output 5V and 12.5V at the same time
- Software and cameras test
 - Test cameras by Raspberry Pi





Next Step

- Finish Source Circuit
 - Make the integrated circuit
- Build 3D model
 - Print the model by 3D printer
- Finish the new glasses
 - Test its performance in hospital



The image features a complex network diagram. A central hyperboloid-like shape is formed by a dense grid of thin, light gray lines that converge towards the center and diverge towards the edges. Scattered throughout this network are numerous small, colored dots in various colors including red, blue, yellow, green, orange, and purple. The text "THANK YOU" is centered horizontally and vertically within the network, rendered in a bold, black, sans-serif font.

THANK YOU