

Haptic Edge Display

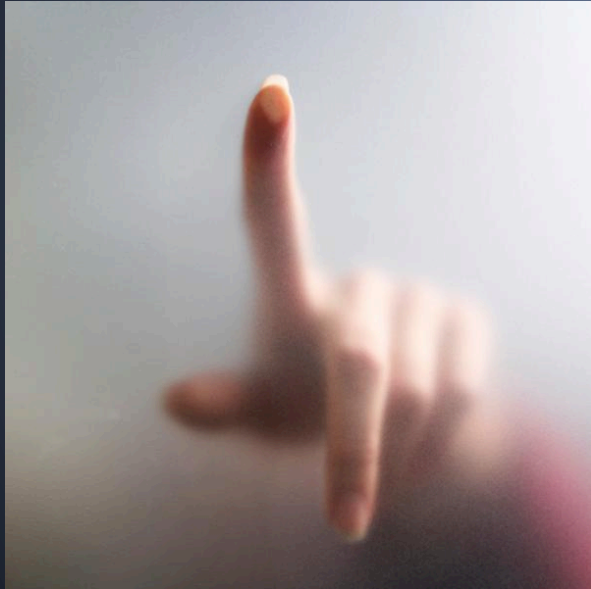
for Mobile Tactile Interaction

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Outline

- Current state of haptics in mobile devices
- Designed system for novel haptic interactions
- Developed example applications with informal user study
- Future work

Limited Means of Interaction

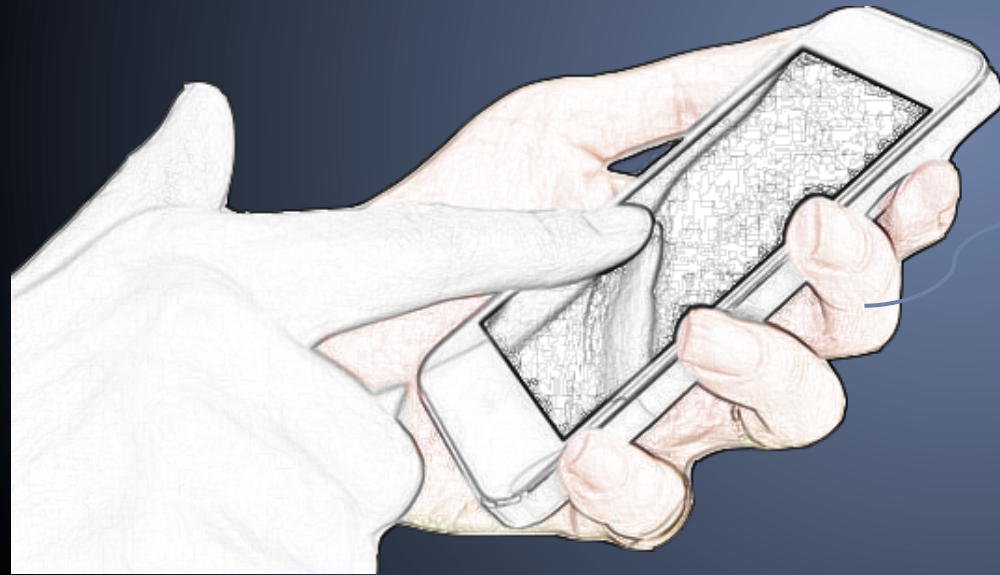


haptics?

Most Prevalent Haptics

((vibration))

Under-utilized

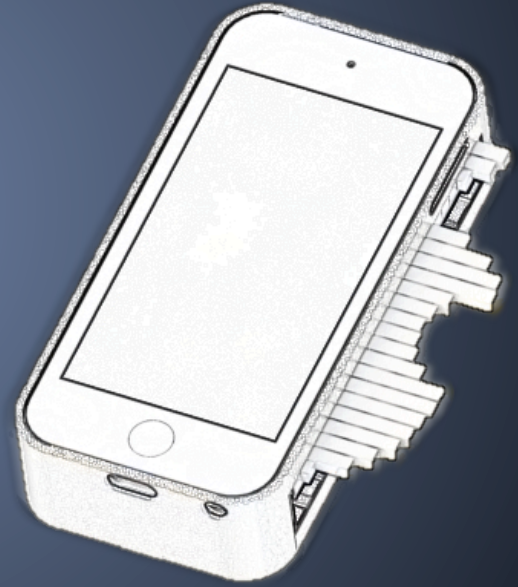


Non-dominant hand

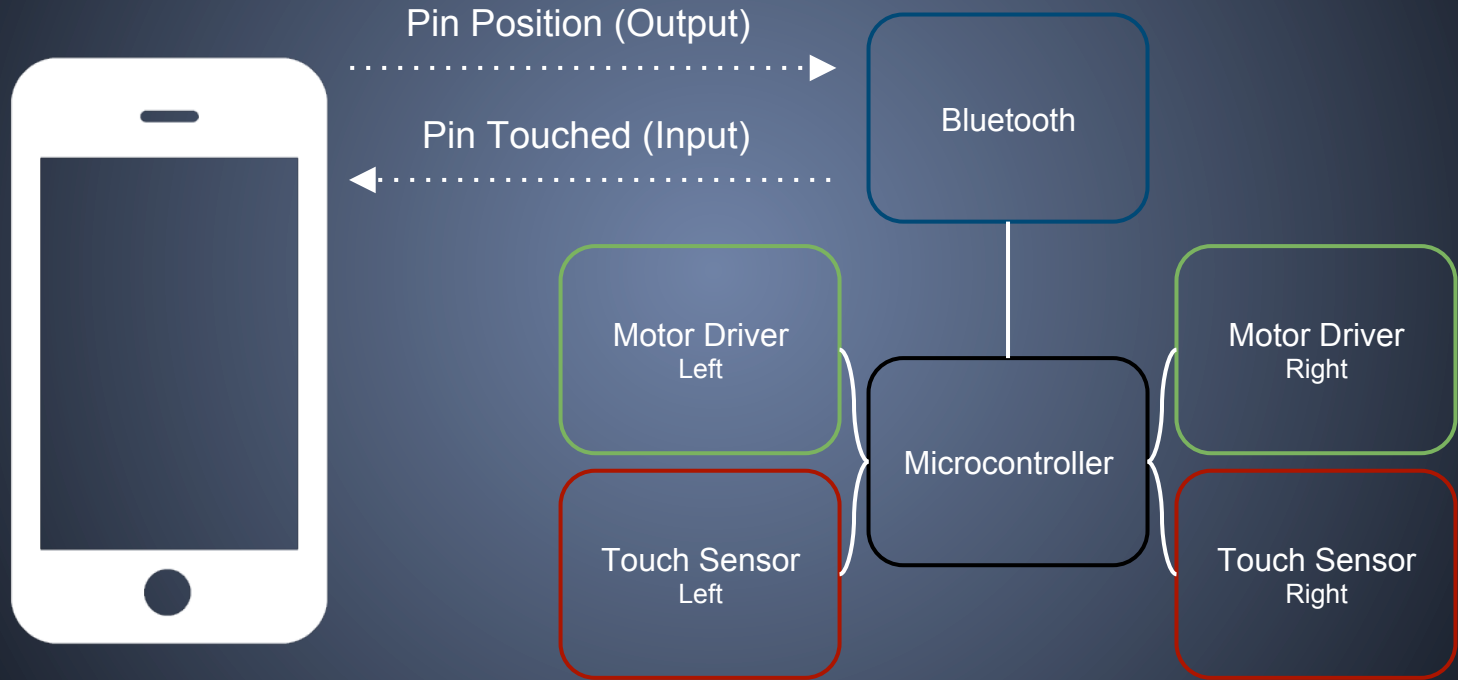
So,

Concept Design

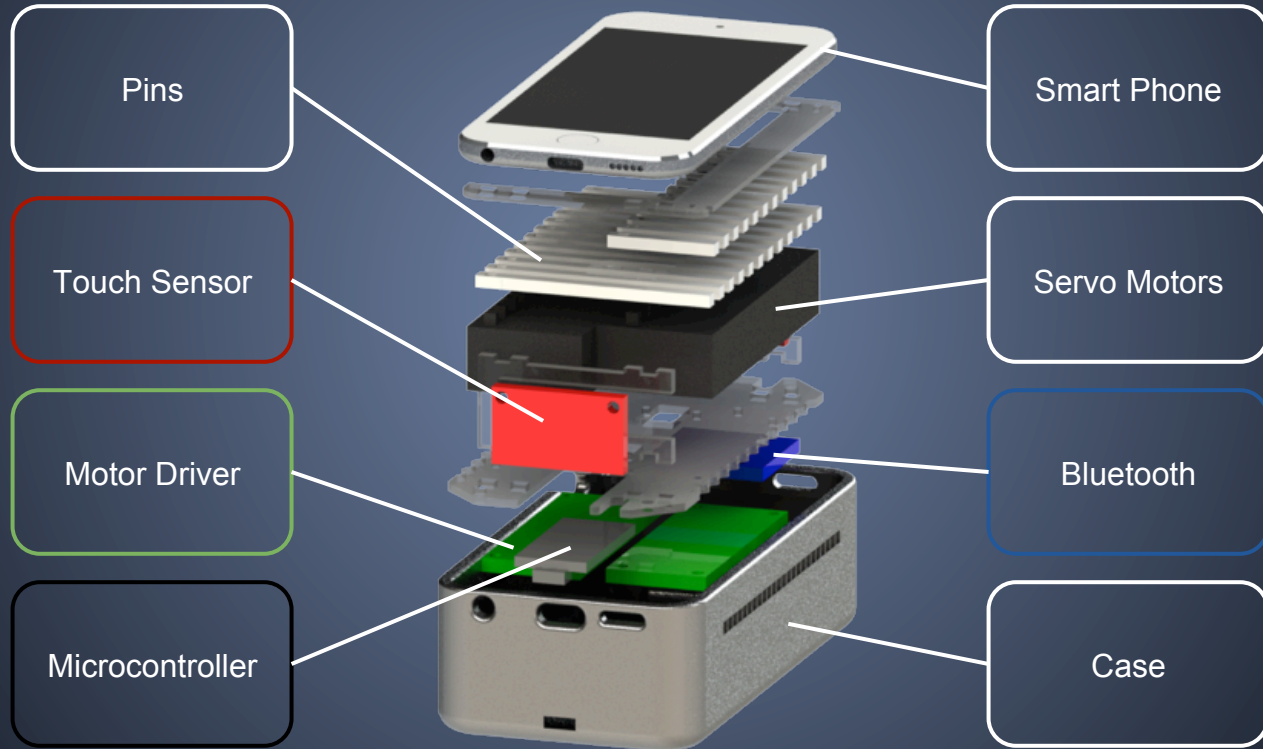
- 24 actuated pins
- Touch sensing (3 mm x 3 mm)
- Bluetooth 4.0 (Low Energy)
- Compact design



Schematics

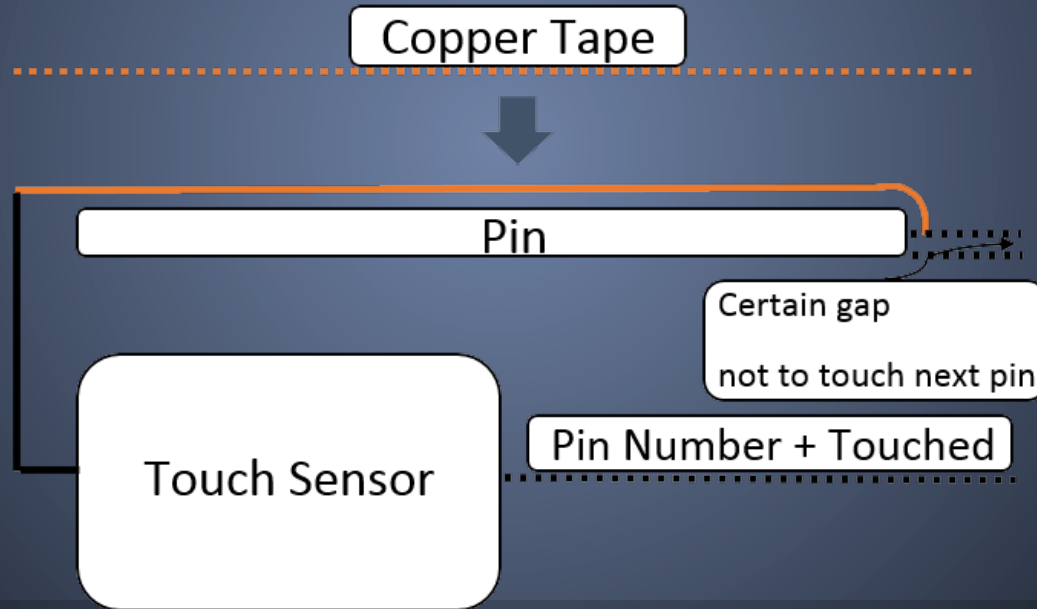


Prototype



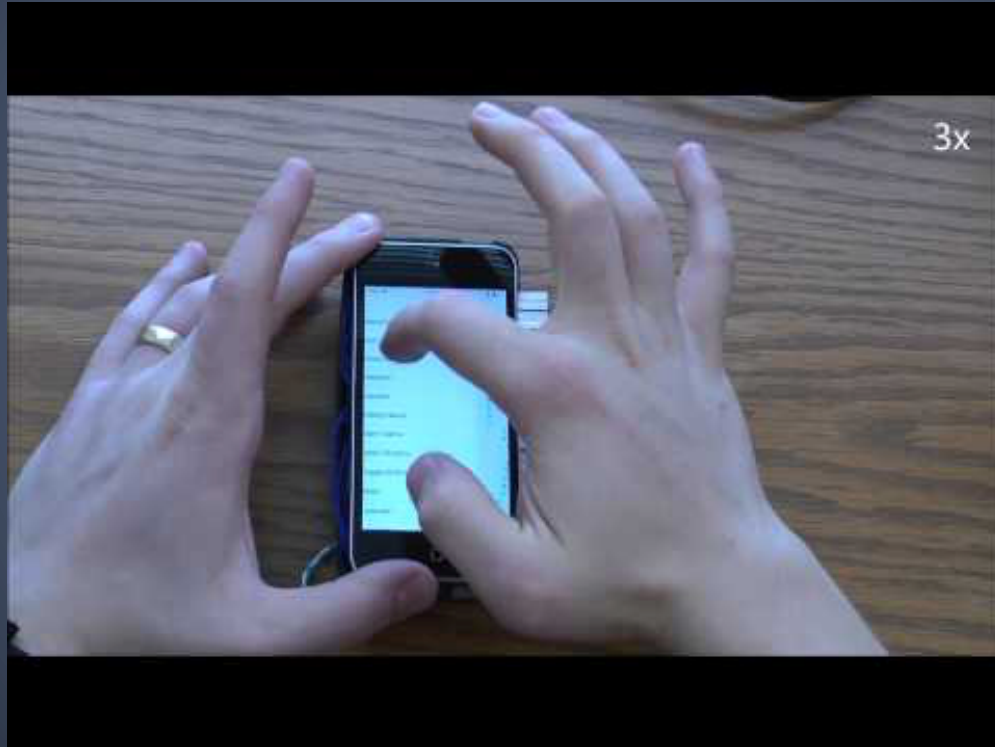
Touch Sensor

Capacitive Touch Sensing



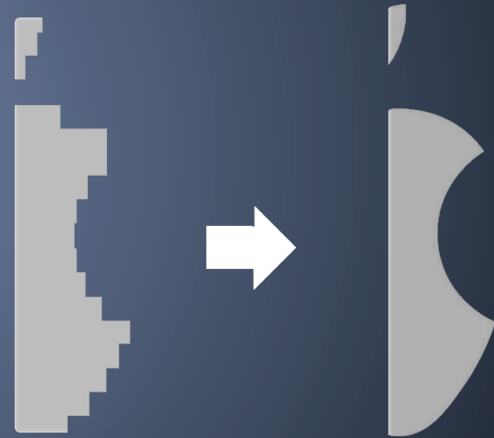
The Result

Applications



Future Work

- Smaller Design
- Higher Resolution
- Better Input
- Pins on both sides



Conclusion

- Designed system for novel haptic interactions
- Developed example applications with informal user study
- Outlined steps for future work

Thank you

