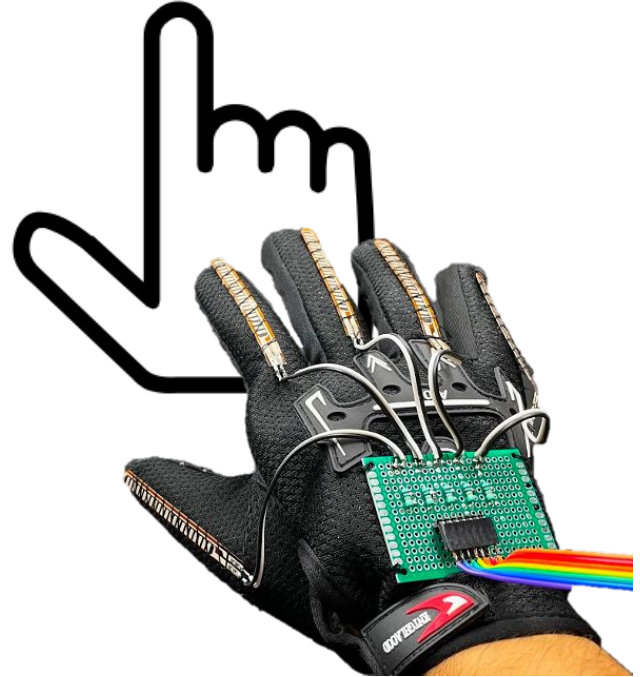


Mouseketool - Use Case

- Controlling your laptop from afar is difficult
- Remotes and mice are cumbersome away from desk

Solution

- The Mouseketool
- Implementation
 - Glove embedded with sensors that converts motion to mouse movement and touch to keystrokes



Solution Approach

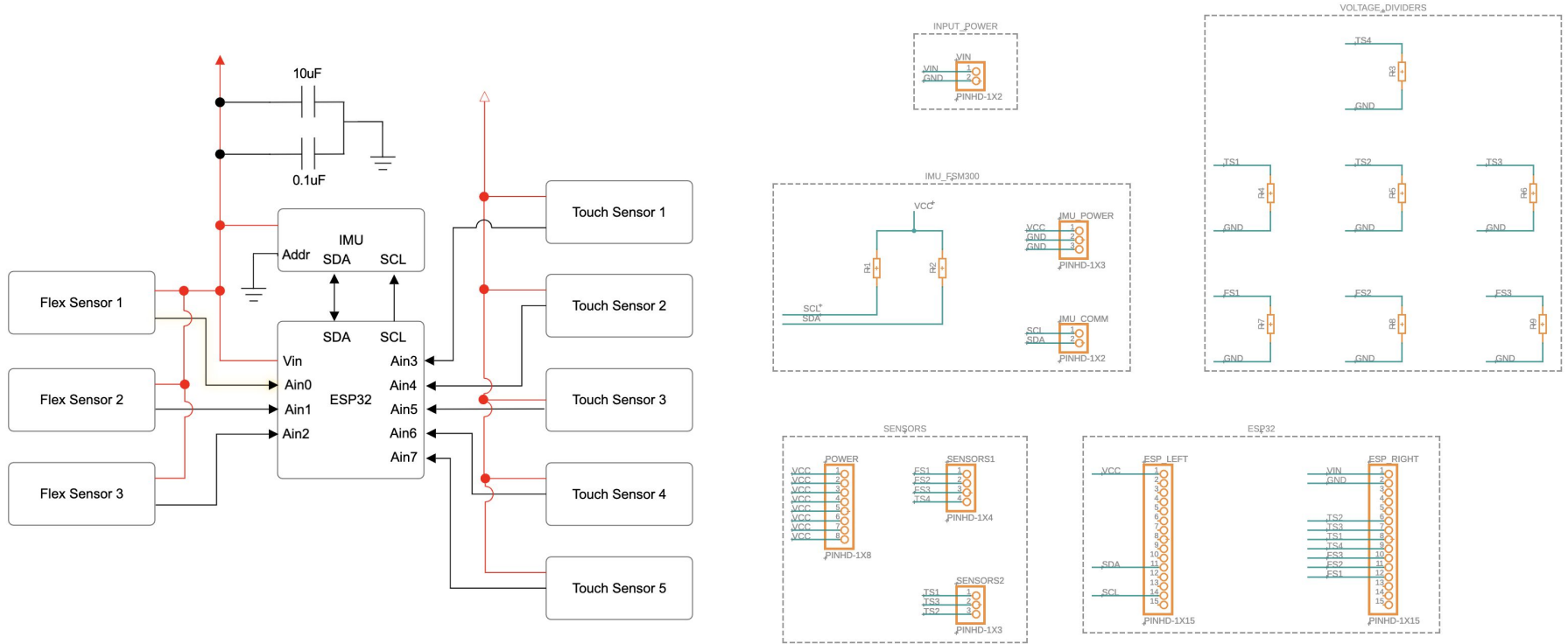


- Tailored to average user
- Wearable technology
- Uses Bluetooth (BLE)
- Accessible for limited mobility

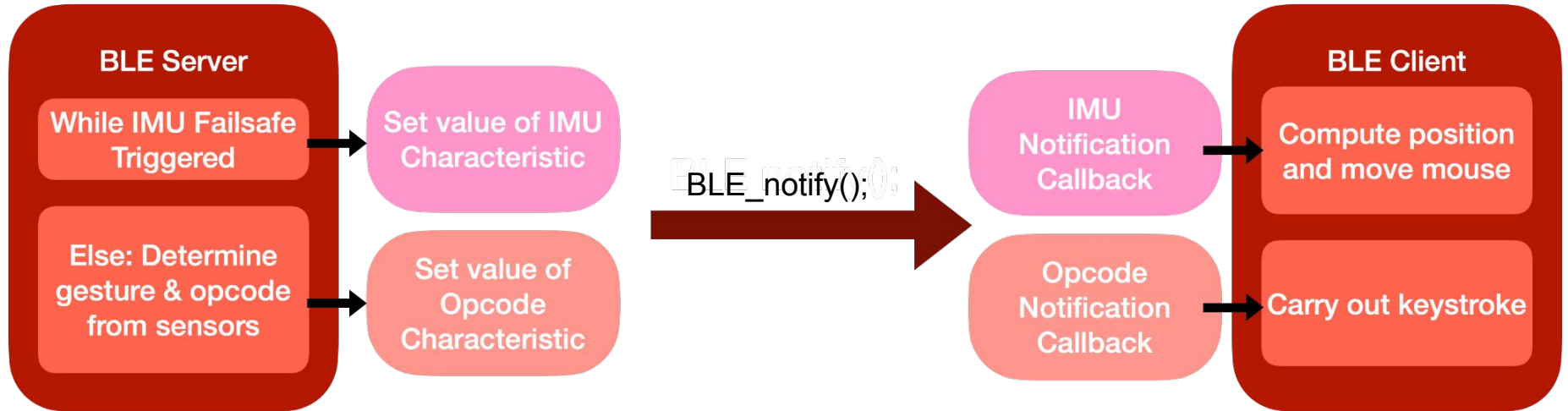
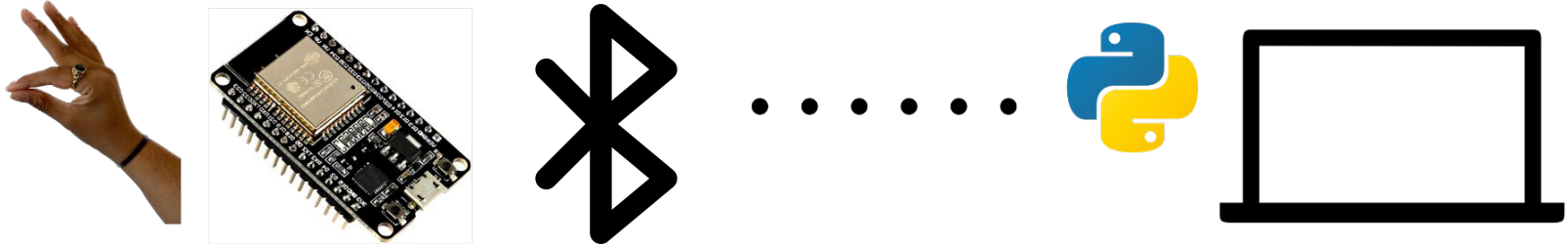
Use Case - Requirements

Requirement	Metric
Latency	300 ms
Weight	113-170 grams
Accuracy	90% user rating
Wireless Range	2.28 meters
Battery Life	2-3 hours

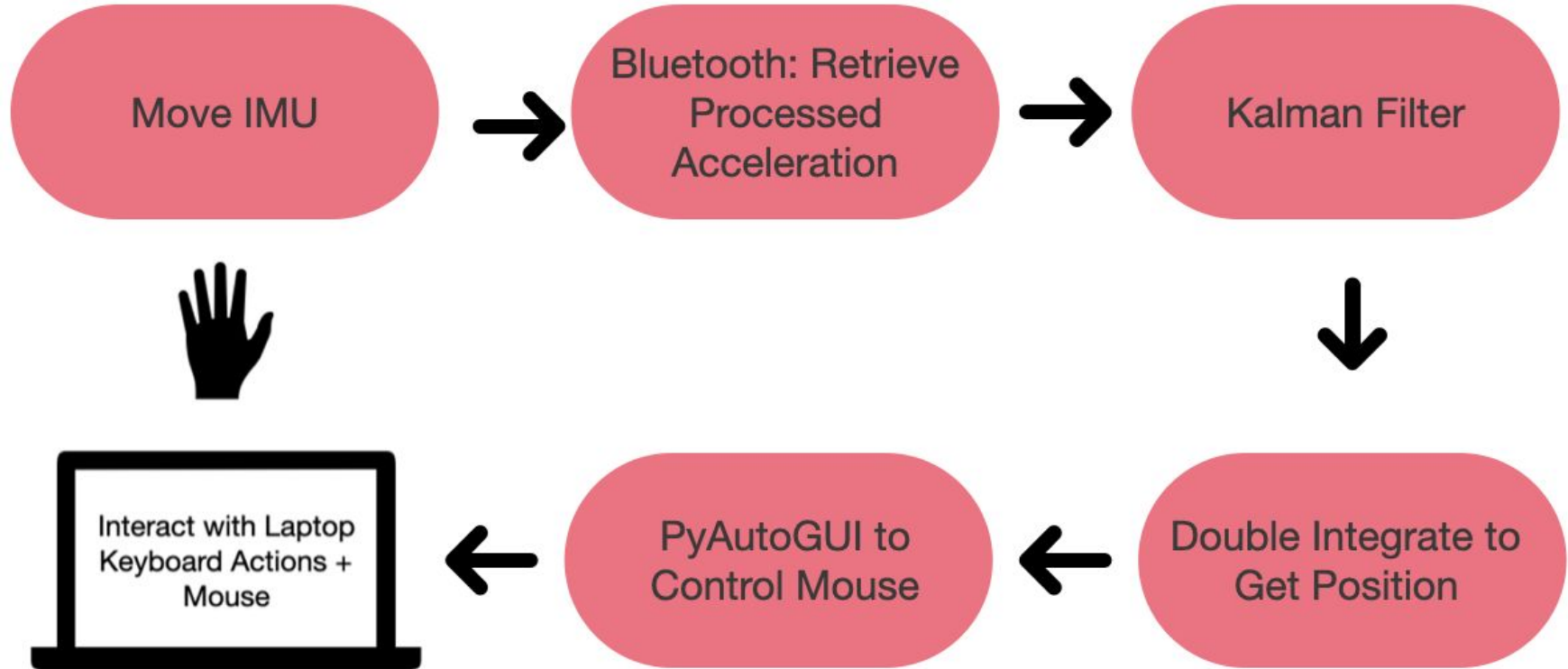
Hardware Diagram/Schematic



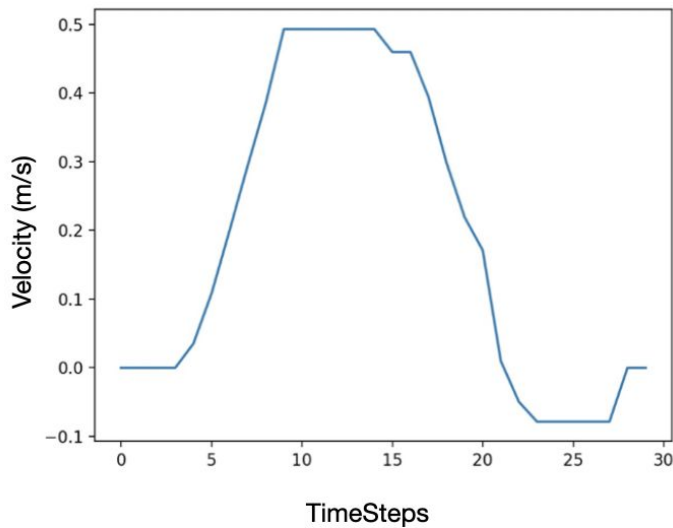
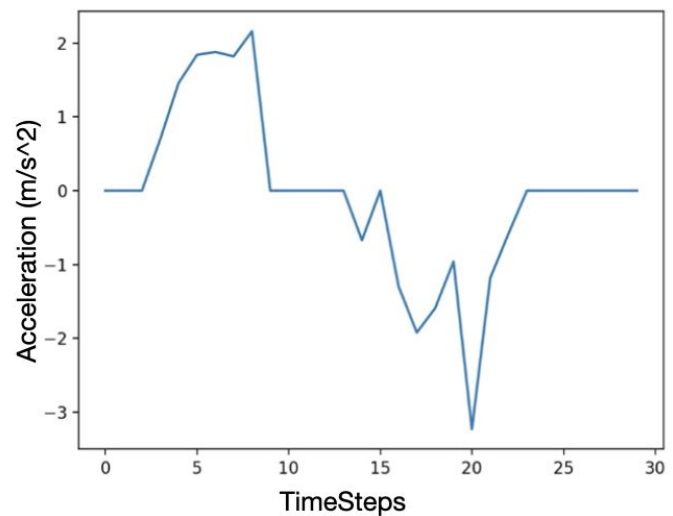
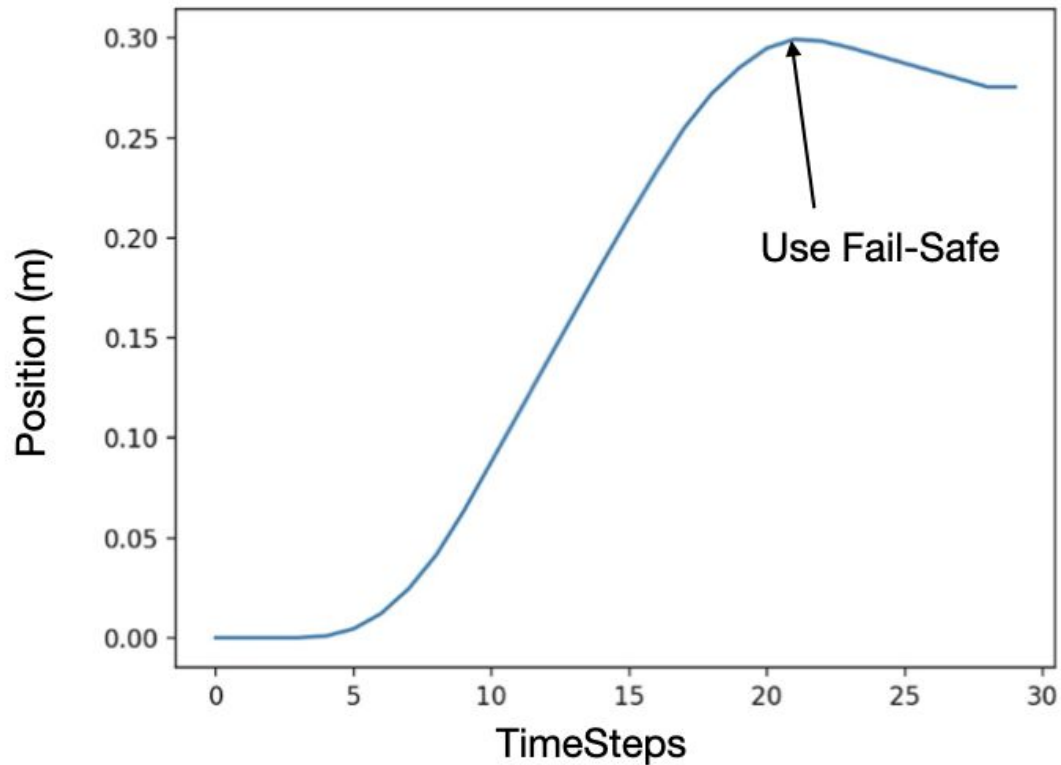
Software Diagram - Bluetooth



Software Diagram - IMU

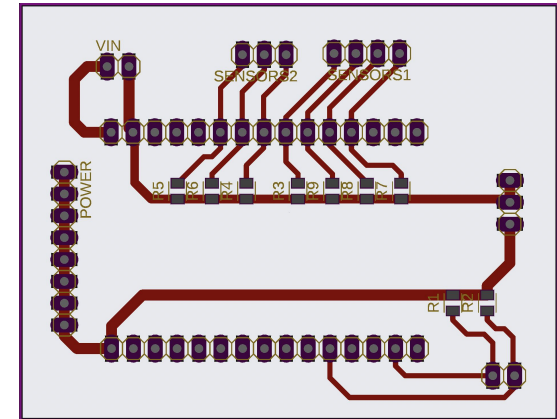
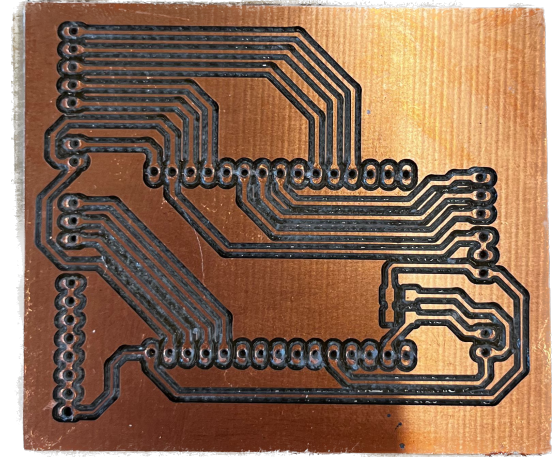


IMU Right Impulse Graphs

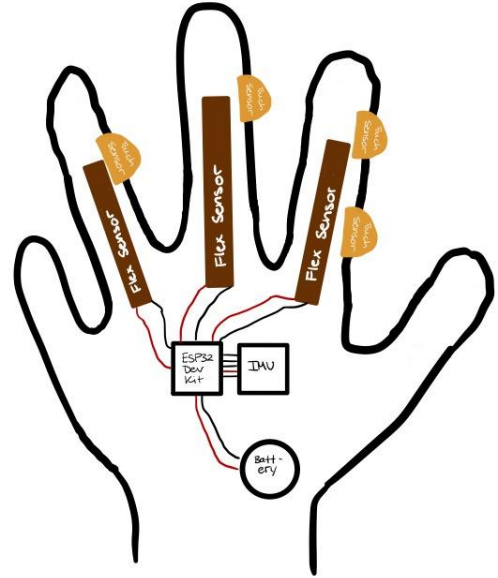
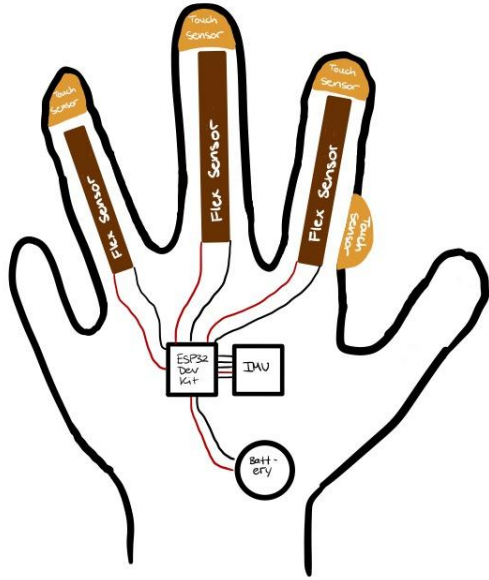


Custom PCB

- Final Dimensions: 62.5 mm x 48.3 mm (about 2" x 2.5")
- Communication protocol resistors
- Sensor parallel resistors
- Lithium ion battery compatible



Positioning



Testing Results

Requirement	Metric	Actual Results
Latency	300 ms	40ms
Weight	113-170 grams	191.78 grams
Accuracy	90%	100% accuracy
Wireless Range	2.28 meters	3.05 meters
Battery Life	2-3 hours	>12 hours

Final Demonstration Expectations

- Sensor 1 (Side of Pointer Finger): Fail-Safe to Move Mouse
- Sensor 2 (Pad of Pointer Finger): Left-Click
- Remaining Sensor Customization Options
 - Open Netflix/Hulu/YouTube
 - Increase/Decrease Volume
 - Increase/Decrease Brightness
 - Screenshot
 - Mute/Unmute
 - Close Tab
 - Switch Apps
- Usable mouse functionality with <1 second latency and position trailing

