

Wearable Sensors For Real-Time Health Monitoring

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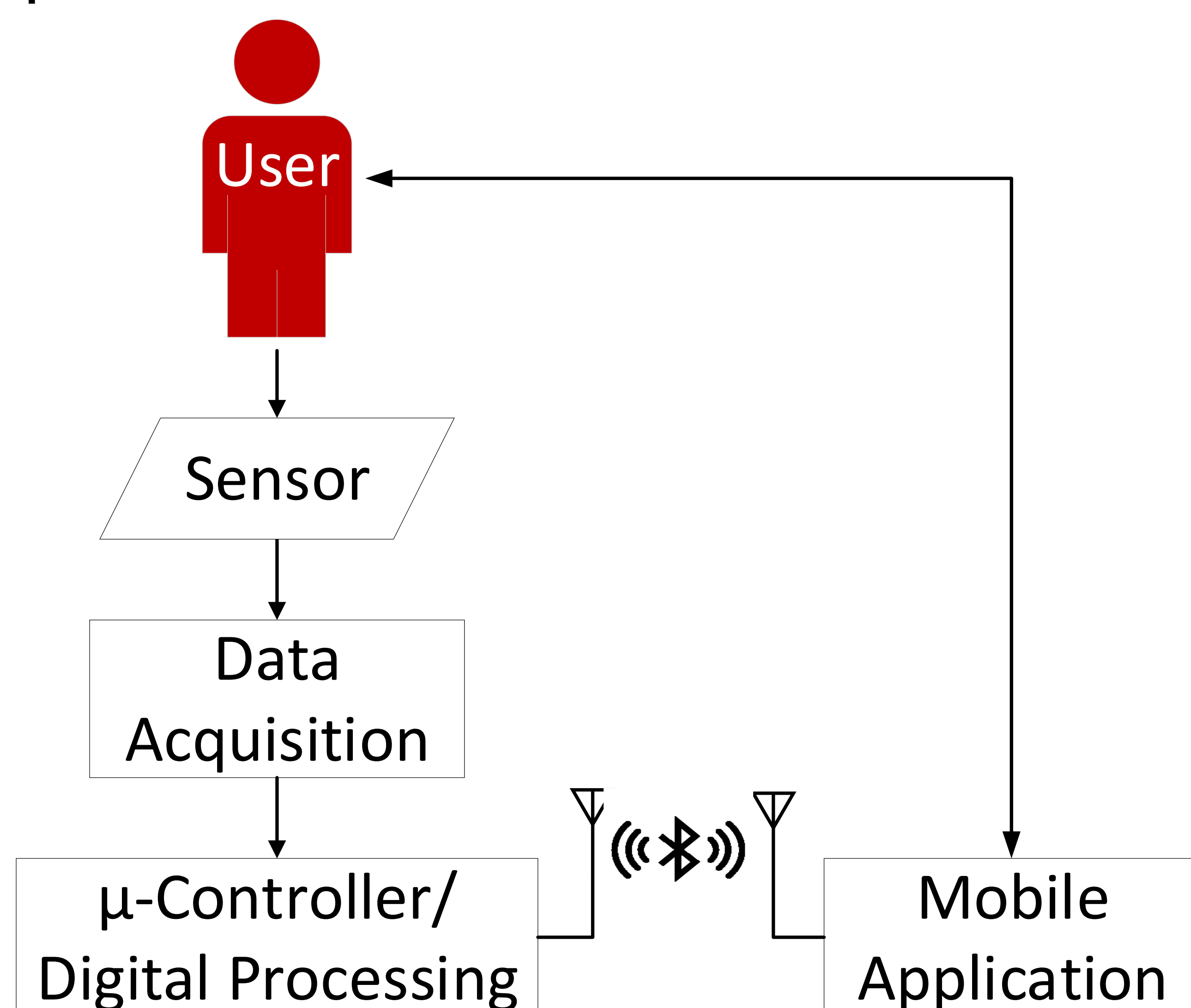
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Our Motivation

- Lack of low-cost options for personal health monitoring devices.
- Expensive devices usually have limited functionality.
- Limited utility due to wet electrodes needing electrolytic gel, which dries out eventually.

Our Solution

A new low-cost sensor fabrication process, a sensing system, and a user-friendly mobile-application.



Design Requirements

Functional

- Durable sensor to monitor movement.
- Conductive electrodes to monitor cardiovascular activity.
- Transfer sensor data using BLE.

Non-Functional

- Sensors will not electrocute user.
- Delete data at user's discretion.
- Application will remain functional during computations.

Operating environment

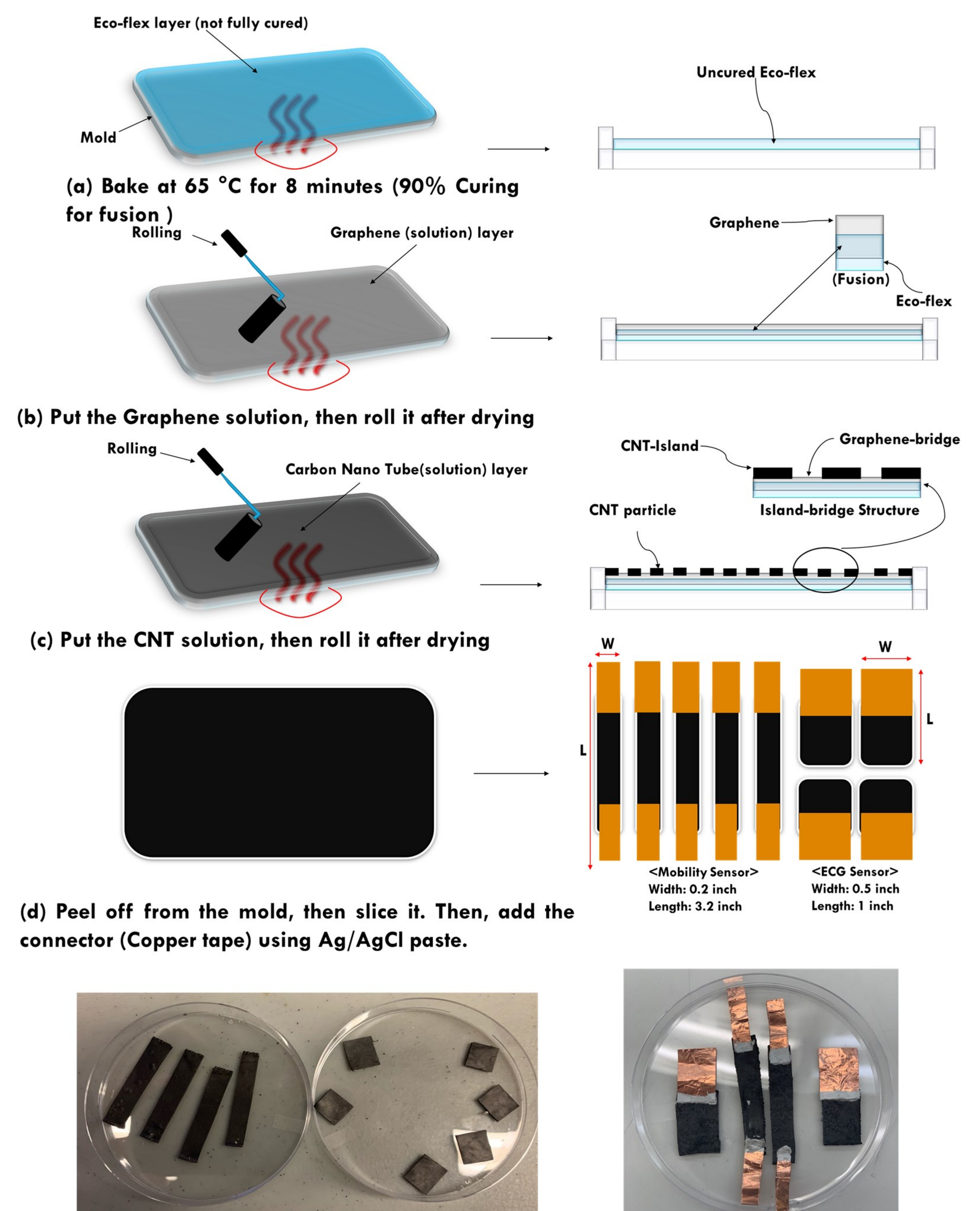
- On skin, under clothing.
- Indoors and moderate outdoor weather.

Intended Users

Medical professionals, athletes, and medical patients.

Fabrication Process

A new state-of-the-art fabrication process was used to fabricate the dry electrodes.



Implementation

- #### Languages
- Java
 - Swift

Development Tools

- X-code
- Android Studio

Testing

- #### Strategy
- System Testing
 - Scenario Testing

