### **Body Sensor Networks**

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# MUNUSC

Chris Mower, Kuo Wong

Body Sensor Networks

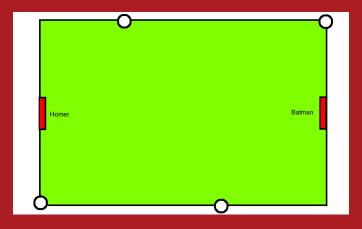
#### This Talk

- Exhibition
  - Paintings
  - Sensor set-up
- App layout
- Code overview
- Integrating Machine Learning
- Stuff Chris doesn't understand. \*\* NEED BETTER NAME \*\*
- Quick Demo

### Exhibition

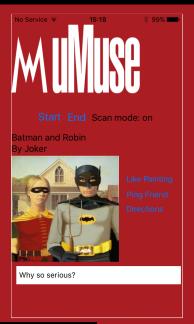


## Sensor Layout



Width: 50cm, Length: 100cm

# App Layout



# Main Program

```
-(void) main:(NSObject *) RSSI {
       NSObject RSSI_use =
         [self discardMostDistantSensor(RSSI)];
3
       double position =
         [self getPosition: RSSI_use]; // x, y values
4
       double dist2painting1 =
         [self computeDistance: position: painting1];
5
       double dist2painting2 =
         [self computeDistance: position: painting2];
       [self reportPosition2server: position];
6
       int nearestPainting = 1;
       if (dist2painting1 > dist2painting2) {
8
9
           nearestPainting = 2;
10
11
       [self updateImageViewer: nearestPainting];
12 }
```

# Integrating Machine Learning

- Learn the most liked painting (not really ML)
- Learn the most walked path.
- Attempt to use walked paths to identify groups/couples.
- Given a new painting with new path, use as indicator of paintings monetary value (new idea).

#### Kuo chat about:

- stuff that Chris doesn't understand..
- (Chris sets up and performs demo after Kuo finished)

## Quick Demo



Thank you for listening! Any Questions?