Wearables Group, Meeting 3: Interests Meeting Notes May 27th 2015

Next Week

Mean and SD of 30s accelerometer sample from Pebble, local to watch only.

Shahriar Nirjon

If we can measure acceleration from every point of a human body, what can we compute?

• First step, get watches and write first app.

People's Interests

Sean: Using external data from our known world, augment it. Find where smartwatches fit in.

Joshua: Applying machine learning to find

Fahd: Using the accelerometer inside a vehicle to do things like safety analysis. Ex: analysing vehicle accidents.

Joshua: Perhaps applying the Pebble to determine when a driver is falling asleep and alerting them.

Amy: Maybe use the watch for apps like Waze where you can update road conditions using your watch. Without looking at your phone (unsafe).

Fahd: Maybe detecting falls?

Fuchs: Very difficult, maybe could work with machine learning?

Muttaqee: Analyse sports like Judo for feedback, help the student learn by letting the machine judge you.

Sean: Use the technology to simulate a good sport instructor.

Fuchs: Over the next week, lets each look at the scientific literature on our topic of interest.

Maybe use it to analyse workouts?

Kammy: Use the sensor to aid in daily activities. But how feasible are these ideas?

Benny: Use the Pebble in sports? For example a baseball pitcher.

Brett: Medical diagnosis, for example repetitive motion diseases.

Jeffrey: Medical applications. E.g. medication reminders, hospital applications.

Amy: What are unique applications of the smartwatch vs the smartphone?

Kammy: Applying smartwatches for tactile feedback, using heart rate data for tactile

biofeedback and stress monitoring

Adam: New to all this, interested in hearing other's ideas.

Luke: Entertainment and disability issues.

Note: Fuchs will be out of town the next couple weeks.

Meeting Schedules

Night meetings?

Multiple meetings? Difficult for people like Dr. Fuchs.

Skype meetings? Maybe for catchup.

Joshua Bakita will present next week on applying the accelerometer and magnetometer.