## Supplementary

Here we provide detailed sensor models for each region. The sensor model was built from 15 days of data to give a general idea how each sensor performs across days. For the experiment itself, as we performed five fold cross validation, we only used 3 days of data to build the sensor model.

Table 1: Averaged sensor model for each region trained from 15 days of data.

Region	Sensor	True Negative	True Positive
1	Leg	0.820	0.102
	Upper body	0.749	0.244
	Scenery change	0.760	0.612
2	Leg	0.991	0.655
	Upper body	0.862	0.691
	Scenery change	0.826	0.778
3	Leg	0.854	0.116
	Upper body	0.833	0.130
	Scenery change	0.780	0.687
4	Leg	0.896	0.180
	Upper body	0.967	0.227
	Scenery change	0.897	0.592
5	Leg	0.918	0.086
	Upper body	0.881	0.200
	Scenery change	0.877	0.957
6	Leg	0.964	0.351
	Upper body	0.929	0.143
	Scenery change	0.803	0.541
7	Leg	0.949	0.264
	Upper body	0.829	0.071
	Scenery change	0.939	0.090
8	Leg	0.889	0.473
	Upper body	0.791	0.360
	Scenery change	0.900	0.591
9	Leg	0.702	0.383
	Upper body	0.711	0.172
	Scenery change	0.591	0.673
10	Leg	0.956	0.537
	Upper body	0.973	0.423
	Scenery change	0.823	0.584