手机正方胸口中央匀速走：

forward acc

### left-right acc

gravity acc

滤波（低通，寻找波峰波谷，满足梯度幅度阈值条件并过滤）：

Forward acc lowpass with Peek

Forward filted acc

Left Right acc lowpass with Peek

(acc m/s^2)

Index

Left Right filted acc

(acc m/s^2)

Index
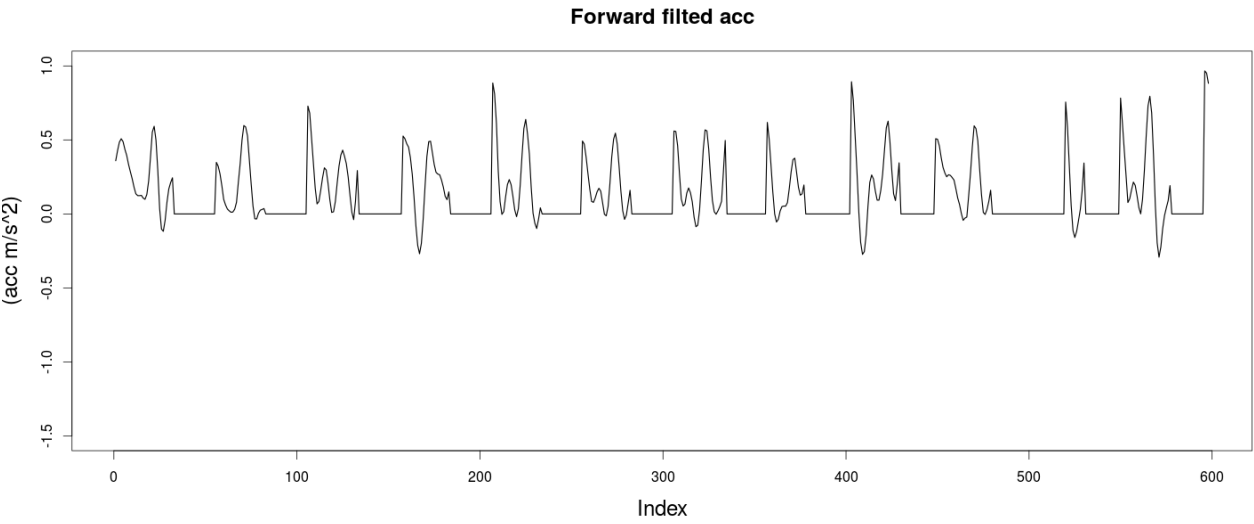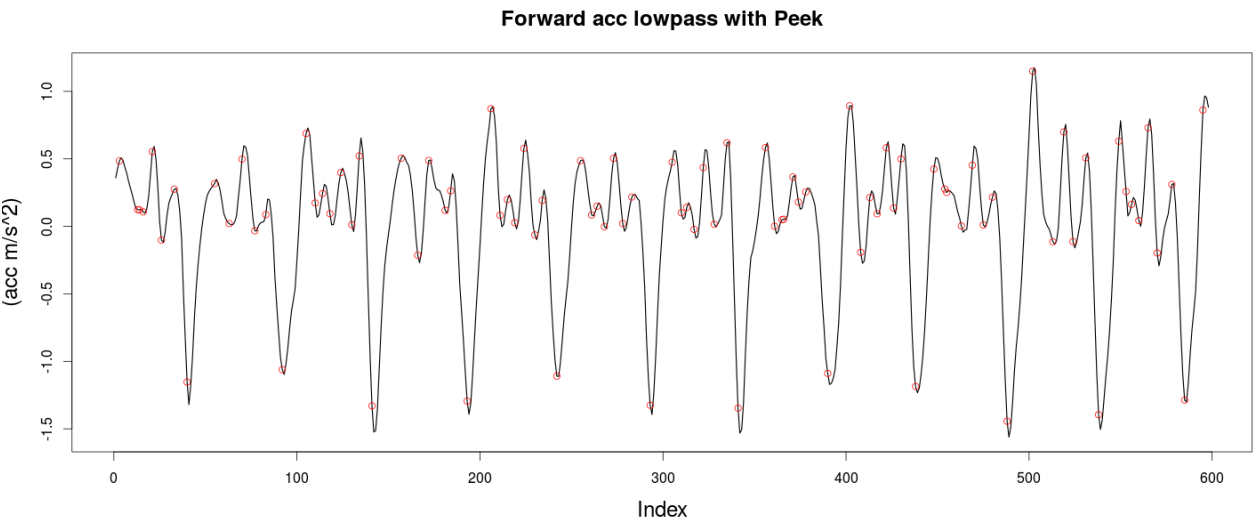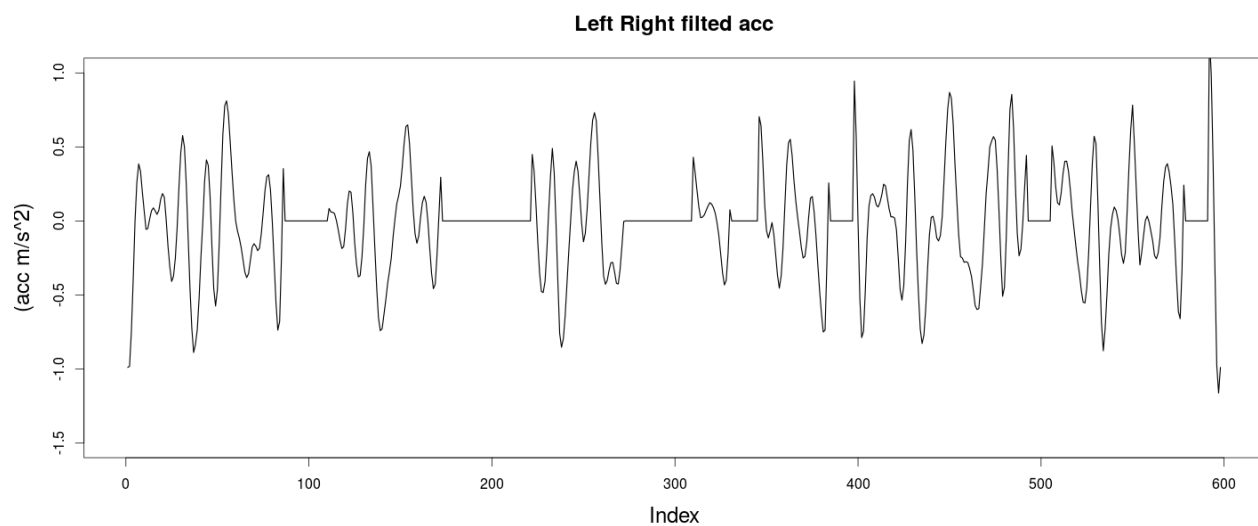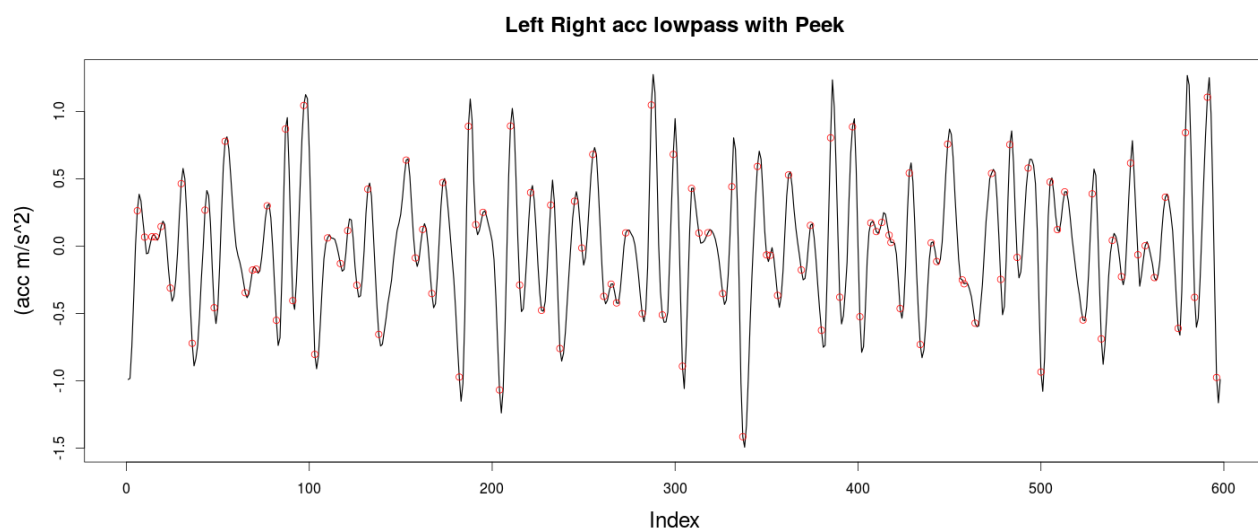
统计值：

方向	均值	方差	大于 0 时的均值	大于 0 时的标准差	滤波后均值	滤波后标准差
向前	-1.453066e-05	0.5815734	0.3425542	0.2645905	0.2255176	0.236497
左右	-0.01463685	0.5809649	0.4482747	0.3902434	-0.03143921	0.3912544
重力方向	-0.002747512	1.091987	0.3425542	0.2645905		

3d vector

forward

right

up

0.3
0.2
0.1
0
-0.1
-0.2
-0.3

0.3
0.2
0.1
0
-0.1
-0.2
-0.3

-0.3   -0.2   -0.1   0   0.1   0.2   0.3

-0.3
-0.2
-0.1
0
0.1
0.2
0.3