**Table 1**: Hyperparameters of the best performing SVM activity classification models.

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| --- | --- | --- |
|  | **Main activity types** | **Rumination** |
| *window size* | 3 s |
| *principal components* | 210 (0.999990 cum. explained variance) | 5 (0.765970 cum. explained variance) |
| *gamma* | 10-4.7 | 10-2.2 |
| *cost* | 103.3 | 106 |
| *class weights* | 1:1:1:1 | 1:1 |