|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Feature name | Window size 8868 | 2217 | 88 | 20 |
| Linear regression | Mean | 53.7 | 64 | 56.8 | - |
| Variance | 58.8 | 57.7 | 56.6 | - |
| std | 58.8 | 56 | 59.7 | - |
| Skew ness | 58.8 | 55 | 59.7 | - |
| kurtosis | 55.5 | 66.7 | 52.9 | - |
| SVM | mean | 59.19 | 71.87 | 72.79 | - |
| variance | 59.19 | 62.36 | 71.50 | - |
| std | 59.19 | 66.17 | 69.85 | - |
| skew | 57.72 | 62.31 | 96.32 | 99.63% |
| kurtosis | 55.88 | 62.50 | 84.00 | - |

Single sensor based prediction.

RAW data:-

|  |  |
| --- | --- |
| Model | Accuracy |
| Multiple linear regression | 74% |
| Logistic regression | - |
| SVM (linear) | 74% |
| SVM (poly) | 90% |
| SVM (rbf) | ~100% (depends on training data size) |
| SVM (sigmoid) | 60% |
| KNN (1,2 neighbours) | ~97% (between 96-100%, fluctuating on shuffle) |
| KNN (2,3,7,8 sensor) | 98.6% |
| K-means clustering | 60% |
| Hierarchical clustering | 59% |

**\*\*\* single segment\*\*\* all sensors at once.**

**Svm:**

* Mean->70.5%
* Variance->73.52%
* Std->75%
* Skew-> 86%
* Kurtosis-> 72%
* Variance,skew:-86.76%
* Std,skew->81%
* Variance,skew,std:-82.35%
* Variance,std:- 66.17%