

Bag of Features Representation: This table provides the names of each feature included in the collection of 76 time series features computed for the Bag of Features representation. The features are listed according to the Python package used to compute them, with TSFEL features further split by domain — as identified in the documentation.

Python Package	Features
antropy (8)	Hjorth Complexity, Higuchi Fractal Dimension, Number of Zero Crossings, Hjorth Mobility, Permutation Entropy, Petrosian Fractal Dimension, Katz Fractal Dimension, SVD Entropy
nolds (4)	Detrended Fluctuation Analysis, Maximum Lyapunov Exponent, Correlation Dimension, Hurst Exponent
TSFEL - Statistical (20)	Absolute Energy, Average Power, Entropy, Human Range Energy, Interquartile Range, Kurtosis, Skewness, Mean, Variance, Mean Absolute Deviation, Mean Absolute Differences, Median, Median Absolute Deviation, Median Absolute Differences, Min, Max, Peak to Peak Distance, Root Mean Square, Zero Crossing Rate, Sum Absolute Differences
TSFEL - Temporal (7)	Area Under the Curve, Autocorrelation, Centroid, Negative Turning Points, Positive Turning Points, Signal Distance, Slope
TSFEL - Spectral (17)	Maximum Frequency, Max Power Spectrum, Median Frequency, Power Bandwidth, Spectral Centroid, Spectral Decrease, Spectral Distance, Spectral Entropy, Spectral Kurtosis, Spectral Positive Turning Points, Spectral Roll-Off, Spectral Skewness, Spectral Slope, Spectral Spread, Spectral Variation, Wavelet Absolute Mean, Wavelet Entropy
tsfresh (16)	Augmented Dickey Fuller Test Statistic, Benford Correlation, C3 Statistic (Lag=4), Count Above Mean, Longest Streak Above Mean, Longest Streak Below Mean, Time Reversal Asymmetry Statistic (Lag=3), Complexity Invariant Distance (CID), Count Below Mean, Ratio Value Number to Time Series Length, 25th Percentile, 75th Percentile, Percentage of Reoccurring Data Points, Percentage of Reoccurring Values, Mean Second Derivative Central, Mean Change
Custom (4)	Simple Exponential Smoothing Parameter Alpha, Time of Maximum Value, KPSS Test Statistic, Linear Trend Timewise