

List of Symbols

Symbol	Description
\mathbf{D}	A training dataset with labeled MTS instances
\mathbf{D}_i	A training dataset with time series of i^{th} component
\mathbf{D}_{-i}	A training dataset consisting the MTS without i^{th} component
\mathcal{D}	A training dataset with time series of any single component
l	Total number of class labels in training dataset
\mathbf{L}	A set of l class labels as L_1, L_2, \dots, L_l
N	Number of instances in a training dataset
N_i	Number of instances with class label L_i
\mathbf{C}^j	j^{th} MTS instance in \mathbf{D}
\mathcal{L}^j	Class label of \mathbf{C}^j and $\mathcal{L}^j \in \mathbf{L}$
n	Number of components in the MTS instance
\mathbf{C}_i^j	j^{th} time series instance of i^{th} component
M	Number of data points in a complete time series
m_i	Number of data points in time series of i^{th} component
λ_i	Sampling rate of i^{th} component
α	Desired level of accuracy
\mathcal{M}	Set of class-wise MRLs for all class labels
\mathcal{A}	Set of attributes obtained from \mathbf{D}
δ	Distance threshold matrix for \mathcal{A}
\mathcal{Z}	Set of $l \times n$ attributes
ξ	Set of error thresholds learned for n components