LIST OF NOTATIONS

Symbols	Definition
R_i	Result of the convolution operation at position i
w_j	Filter coefficients or kernel weights
z_{i+j}	Values from the input sequence at position $i + j$
m_i	Maximum value in the pooling region R_i
c_t	Output from the attention layer
h_j	Input values or features
α_{tj}	Attention weights assigned to each feature
$m(t)$	Average envelope of the signal
$emax(t)$	Upper envelope of the signal at time t
$emin(t)$	Lower envelope of the signal at time t
$h(t)$	First Intrinsic Mode Function (IMF) candidate
$\text{IMF}_1(t)$	First Intrinsic Mode Function
$r(t)$	Residual signal after subtracting $\text{IMF}_1(t)$ from the original signal
$x(t)$	Original signal
$\text{IMF}_i(t)$	i-th Intrinsic Mode Function
$r_k(t)$	Residual term after extracting k IMFs
$\text{cov}(A, B)$	Covariance between actual values A and predicted values B
σ_A	Standard deviation of A
σ_B	Standard deviation of B
CC	Correlation coefficient, quantifying the strength and direction of the linear relationship between A and B
b_i	Actual load value
$\hat{b}_i$	Predicted load value
$RMSE$	Root Mean Squared Error, measuring the magnitude of errors between actual and predicted values
$MAPE$	Mean Absolute Percentage Error, indicating prediction accuracy in percentage terms
n	Number of observations