Original Variables

Preprocessing Layer (missing values handling)

Principal Component Analysis

PC_1 .... PC_k .... PC_n

Filtering (x% Retained Variance)

PC_1 .... PC_k

Upsampling Back to n Dimensions

LSTM Reshaping Layer

Forecasting Layer (LR, SVR, LSTM)

Metrics Layer

.... Dimensionality reduction section is either used or not for comparison

— — Specific only to LSTM Forecasting Layer

k - is chosen such that 95/98/99% of variance is retained