

## Temporal Pattern Embedding

Input Signal [B, L, C]

1D-Convolution Filters with different kernel sizes

Conv1D (k=9)

Conv1D (k=13)

Conv1D (k=17)

Conv1D (k=21)

Embedding Vector  $4 \times [B, L, 4]$

Channel Concatenation

Embedding Vector [B, L, 16]

## Position Embedding

$$PE(pos, 2i + 1) = \cos\left(\frac{pos}{10000^{2i/d_{\text{model}}}}\right)$$

$$PE(pos, 2i) = \sin\left(\frac{pos}{10000^{2i/d_{\text{model}}}}\right)$$

+

Embedding Vector [B, L, 16]