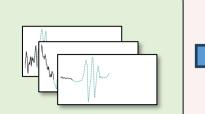


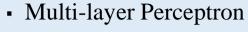
Pre-processing

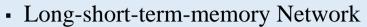
- Padding
- Truncation
- Resampling
- Wraping





Backbones





- Convolutional Neural Networks
- Transformers



















Pooling-based

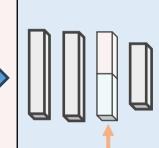
Pooling

Other pooling



$$\mathbf{T} = (T^1, T^2, \dots, T^B)$$

Backbones



- Multi-layer Perceptron
- Long-short-term-memory Network
- Convolutional Neural Networks
- Transformers

pooling layer

Evaluation datasets and Metrics

Datasets

Time series

14 variable-length time series datasets

Gesture recognition

- low degrees of fluctuation
- length ranges from tens to hundreds

Device identification

- regular and repetitive changes
- length ranges from one hundred to over a thousand

Asphalt pavement

- frequent and sharp fluctuations
- length ranges from tens to thousands

Metrics

- Accuracy
- Bayesian Wilcoxon signed-rank test