

Package ‘minirocketR’

September 8, 2026

Type Package
Title 'MiniRocket': A Very Fast (Almost) Deterministic Transform for Time Series Classification
Version 0.1.0
Description High-performance R and C++ implementation using 'OpenMP' parallelization for the 'MiniRocket' algorithm. Extracts features from univariate time series for downstream classification as described in 'Dempster et al.' (2021) ([doi:10.1145/3447548.3467231](https://doi.org/10.1145/3447548.3467231)).
License GPL (>= 3)
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minirocket_fit	<i>Fit a MiniRocket Feature Transformer</i>
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Description

Fit a MiniRocket Feature Transformer

Usage

```
minirocket_fit(  
  X,  
  num_features = 10000,  
  max_dilations_per_kernel = 32,  
  seed = NULL  
)
```

Arguments

X	A numeric matrix of dimensions N x L.
num_features	Integer. Target number of features (default: 10000, yields 9996).
max_dilations_per_kernel	Integer. Maximum number of dilations considered per kernel (default: 32, as in the reference MiniRocket implementation).
seed	Optional integer random seed.

Value

An object of class minirocket.

Examples

```
# Create a synthetic matrix of 10 time series of length 50.  
set.seed(42)  
X <- matrix(rnorm(10 * 50), nrow = 10, ncol = 50)  
  
# Fit the MiniRocket model.  
mod <- minirocket_fit(X, num_features = 1000, seed = 42)  
print(mod)
```

minirocket_transform	<i>Transform Time Series into MiniRocket Features</i>
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Description

Applies a fitted minirocket model to extract PPV feature matrices using OpenMP parallelization in C++.

Usage

```
minirocket_transform(object, X, num_threads = 1, ...)
```

Arguments

object	A fitted minirocket model object.
X	A numeric matrix of dimensions N x L.
num_threads	Integer specifying CPU threads (default 1).
...	Unused additional arguments.

Value

A numeric matrix of size N x 9996 containing PPV features (by default).

Examples

```
set.seed(42)
X <- matrix(rnorm(10 * 50), nrow = 10, ncol = 50)

# Training and transform.
modelo <- minirocket_fit(X, num_features = 1000, seed = 42)
X_feat <- minirocket_transform(modelo, X)

dim(X_feat)
```

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