

UNIVERSE

Our Software

+ Create a new project

Projects

00_AD	Anomaly detection
00_C	Classification
Project AD	Anomaly detection
Project C	Classification
multi	Classification
...	Classification

Project type:

Select an Option...

Name: Project name

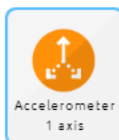
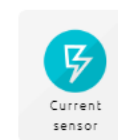
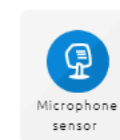
Description: Project description

Target: M0

Max RAM: 16 kB

Max Flash: 64 kB

Sensor types :

Accelerometer
1 axisAccelerometer
2 axesAccelerometer
3 axesCurrent
sensorMicrophone
sensor

CREATE



TIPS



Project



Project type

Train model directly on your MCU with "Anomaly detection" or on your computer with "Classification".



Target

The type of microcontroller used.



Max RAM

Maximum amount of RAM (in kB) you wish to dedicate to NanoEdge AI on the microcontroller.



Max Flash

Maximum amount of Flash (in kB) you wish to dedicate to NanoEdge AI on the microcontroller.



Sensor types

Choose the type of sensor used to collect data.

Tutorials

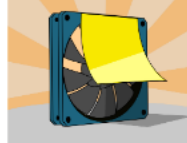
CLASSIFICATION



What's my fan speed?
STM32

Accelerometer

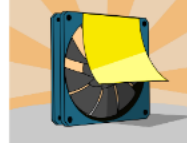
ANOMALY DETECTION



Is my fan obstructed?
STM32

Accelerometer

ANOMALY DETECTION



Is my fan obstructed?
Arduino

Accelerometer

ANOMALY DETECTION



Is my bag full?
STM32

Current sensor

ANOMALY DETECTION



Is my coffee ready?
STM32

Accelerometer

ANOMALY DETECTION



Does my ukulele sound
right?
STM32

Accelerometer

Other tutorials





Global settings



Regular signals



Abnormal signals



Optimize and Benchmark



Emulator



Deploy

1

Project AD
M0
16kB RAM
1 axis

2

Choose Signals

1 File

3

Choose Signals

1 File

4

START

Time: ~

5

1 Benchmark

6

0 Archived libraries

Advanced settings

1.csv

1.csv

Lines in file

11

Number of values per line

256

Check for RAM



File not empty



Numeric values only



No empty lines



Check for maximum line length



Check for minimum lines



Check for more than one sample



Check for constant samples



Check for duplicates



Check for outliers



Check for random



Check equal consecutive values

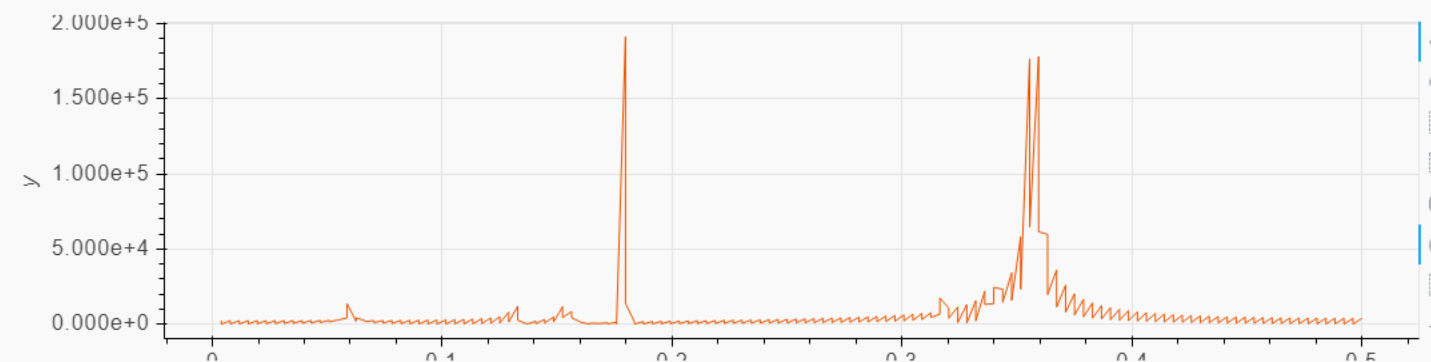
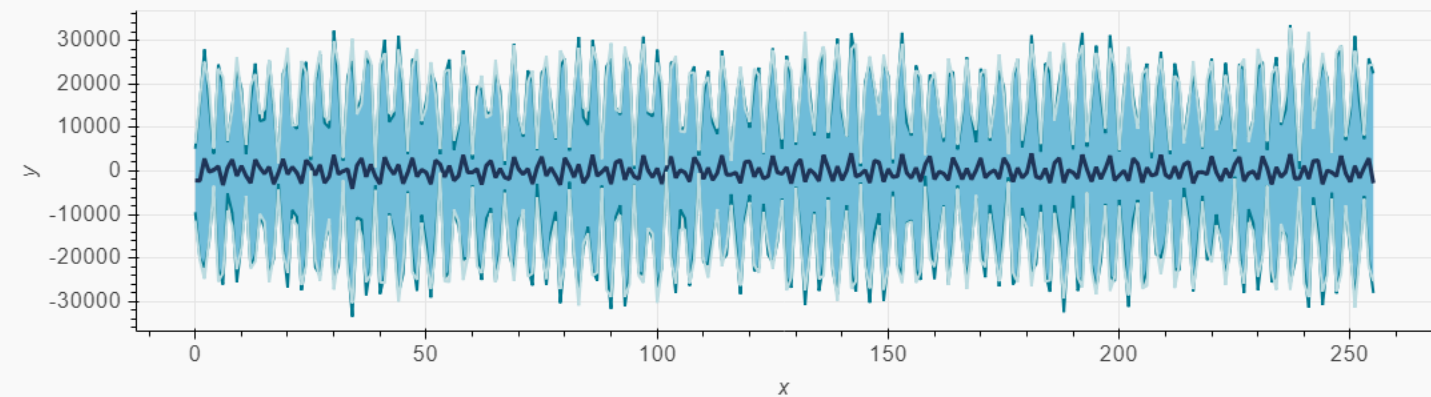


Check signal number columns power two



Signal preview

Axis 1





Global settings



Signals



Optimize and Benchmark



Emulator



Deploy

1

Project C
MO
16kB RAM
1 axis

2

28 Class(es)

3

START

Time: ~

4

1 Benchmark

5

0 Archived libraries

Advanced settings

Valid characters for class name are letters [A-Z a-z], numbers [0-9], underscore, dash and limit length is 20 characters.

1csv1

1.csv

Lines in file

11

Number of values per line

256

Check for RAM



File not empty



Numeric values only



No empty lines



Check for maximum line length



Check for minimum lines



Check for more than one sample



Check for constant samples



Check for duplicates



Check for outliers



Check for random



Check equal consecutive values

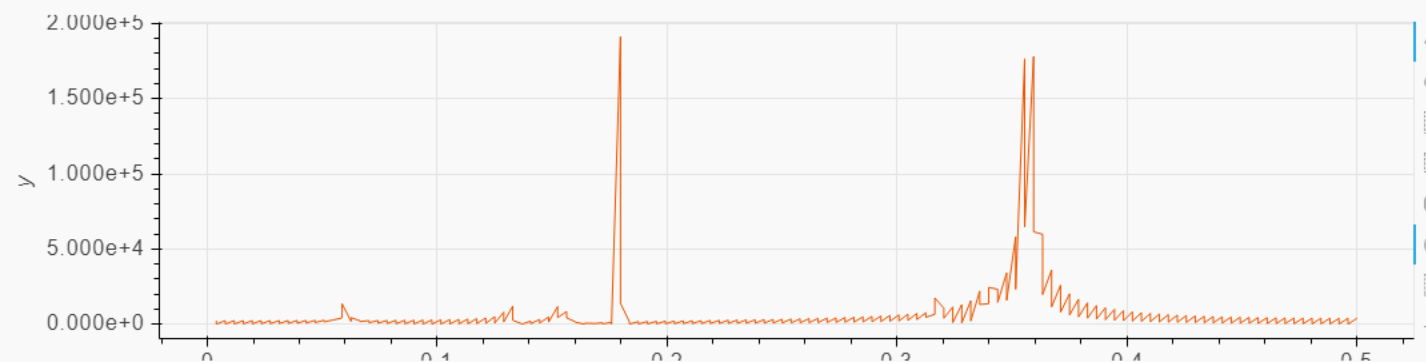
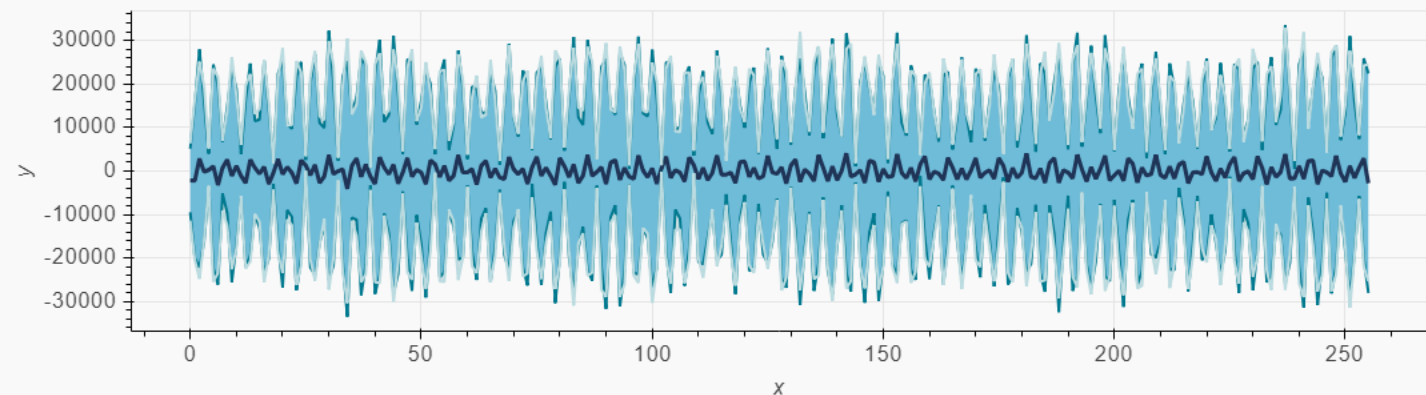


Check signal number columns power two



Signal preview

Axis 1





Global settings



Regular signals



Abnormal signals



Optimize and Benchmark



Emulator



Deploy

1

Project AD
M0
16kB RAM
1 axis

2

Choose Signals

1 File

3

Choose Signals

1 File

4

START

Time: ~

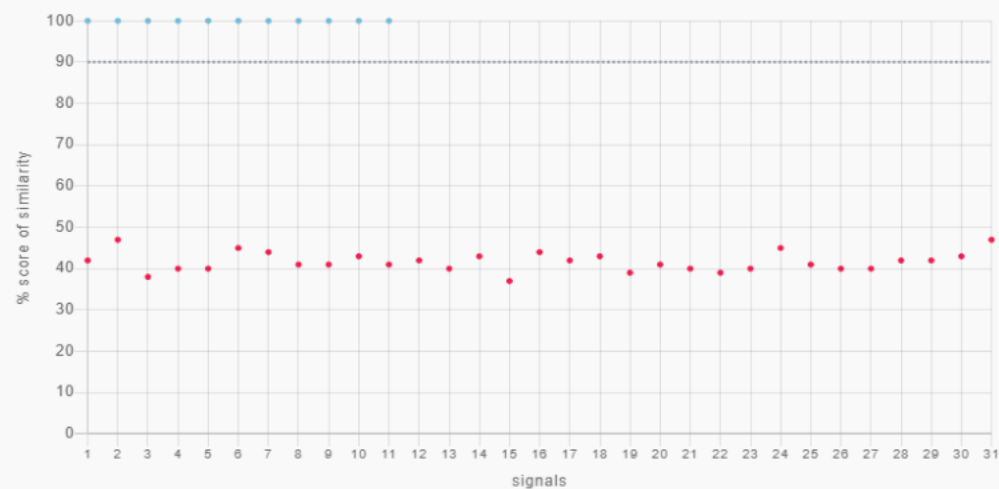
5

1 Benchmark

6

1 Archived libraries

benchmark2021-02-18 10:05

BALANCED ACCURACY
100.00%CONFIDENCE
98.57%RAM
4.1kB
+ Buffer 1 kBFLASH
5.8kB

Regular signals Abnormal signals Threshold (90%)

Name benchmark2021-02-18 10:05

Date 2021-02-18 10:05

Search duration 24s

Result 7 libraries

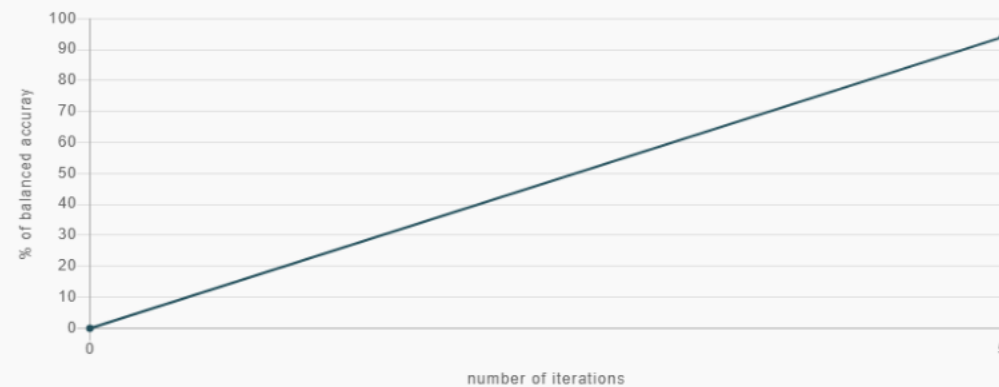
Filter FFT: Deactivated

Signal sample files used:

-1.csv
-2.csv

5 iterations*

* Minimum learn() function calls recommended for efficient learning



ICONS

The Icons we want to refresh



Global settings



Regular signals



Abnormal signals



Optimize and Benchmark



Emulator



Deploy



Global settings



Signals



Optimize and Benchmark



Emulator



Deploy



These icons have an important presence in the software and we would like to update them, moreover a simple animation is desired on them precisely.



Home



Settings



Bug report



Documentation



Log file



Workspace (dir)



License key



Proxy



Language



Admin



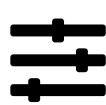
Import/Export



Chevron left



Chevron right



Advanced setting



Documentation



Delete



Info



Info



Download



Refresh



Help



Close



Signal type



Logging style



Delete/Cancel



Validate



Modify



Record



Stop



New



Best (selected
library)



Copy



Flash (memory)



Sensor type



Target MCU



RAM



Project type
(Anomaly
detection or
Classification)



Tips



Accuracy



Confidence



Check warning



Check bad



Check good



Pause

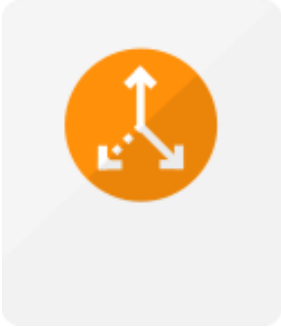


Compilation

SENSOR TYPES:



Accelerometer 1
axis



Accelerometer 2
axes



Accelerometer 3
axes



Current sensor



Hall sensor



Multi-sensor



Generic sensor



Microphone sensor