

Devices

Protocol

 Toggle Plot

Virtual Hand Interface

Open

 Use external Virtual Hand Interface

Biosignal Device Interface

Device

Muovi

Connection parameters

IP

169.254.136.115

Update

Port

54321

Input Parameters

Working Mode

EMG

Detection Mode

Monopolar - Low Gain

Commands

Connect

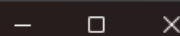
Configure

Stream

Logging

FPS:

INFO : MyoGestic started



Devices Protocol

Toggle Plot

Virtual Hand Interface

Use external Virtual Hand Interface

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Device

Connection parameters

IP

Port

Input Parameters

Working Mode

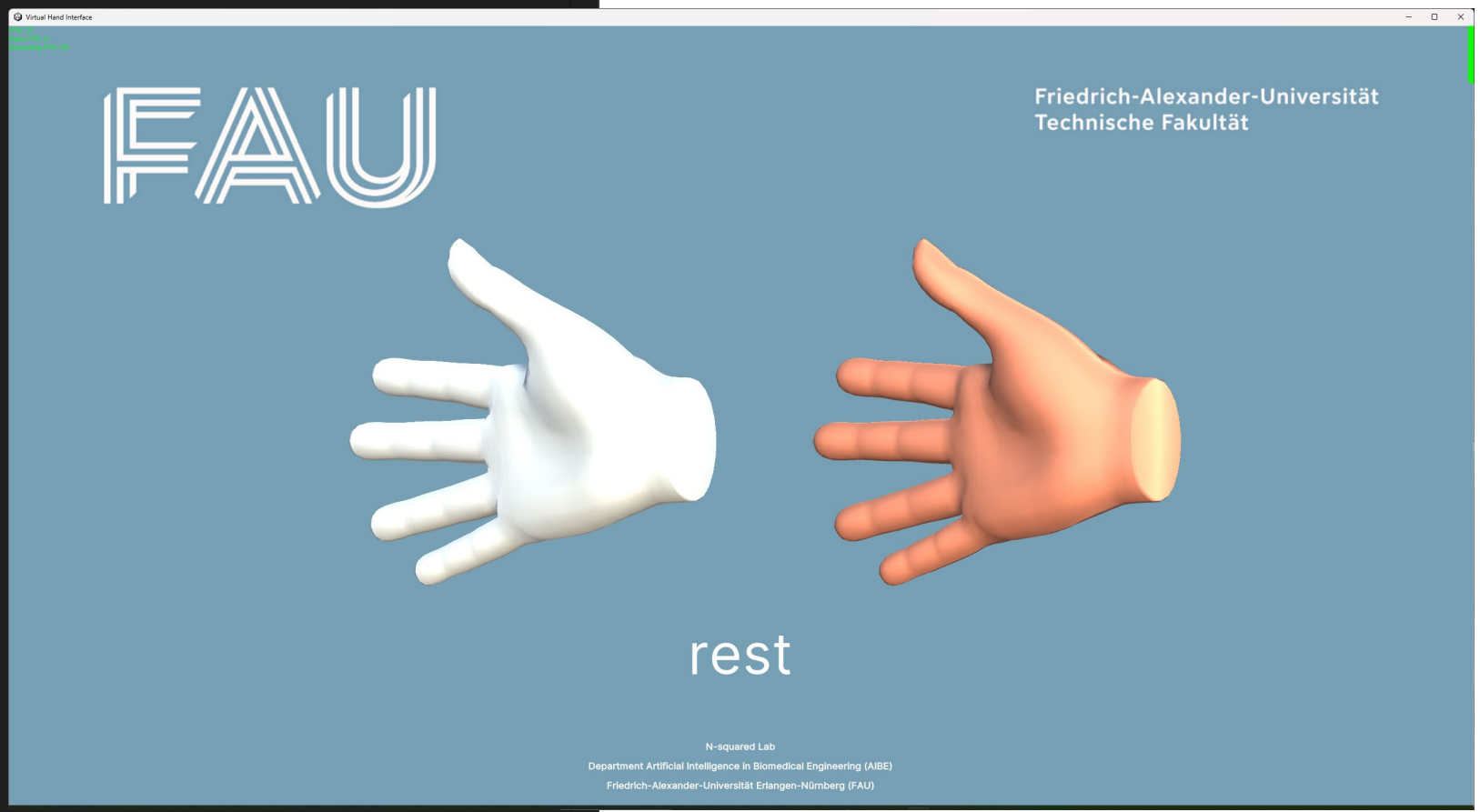
Detection Mode

Commands

Logging

FPS:

INFO : MyoGestic started



Devices Protocol Toggle Plot

Virtual Hand Interface

Open

Biosignal Device Interface

Device Muovi

Connection parameters

IP 169.254.136.115 Update

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Input Parameters

Working Mode EMG

Detection Mode Monopolar - Low Gain

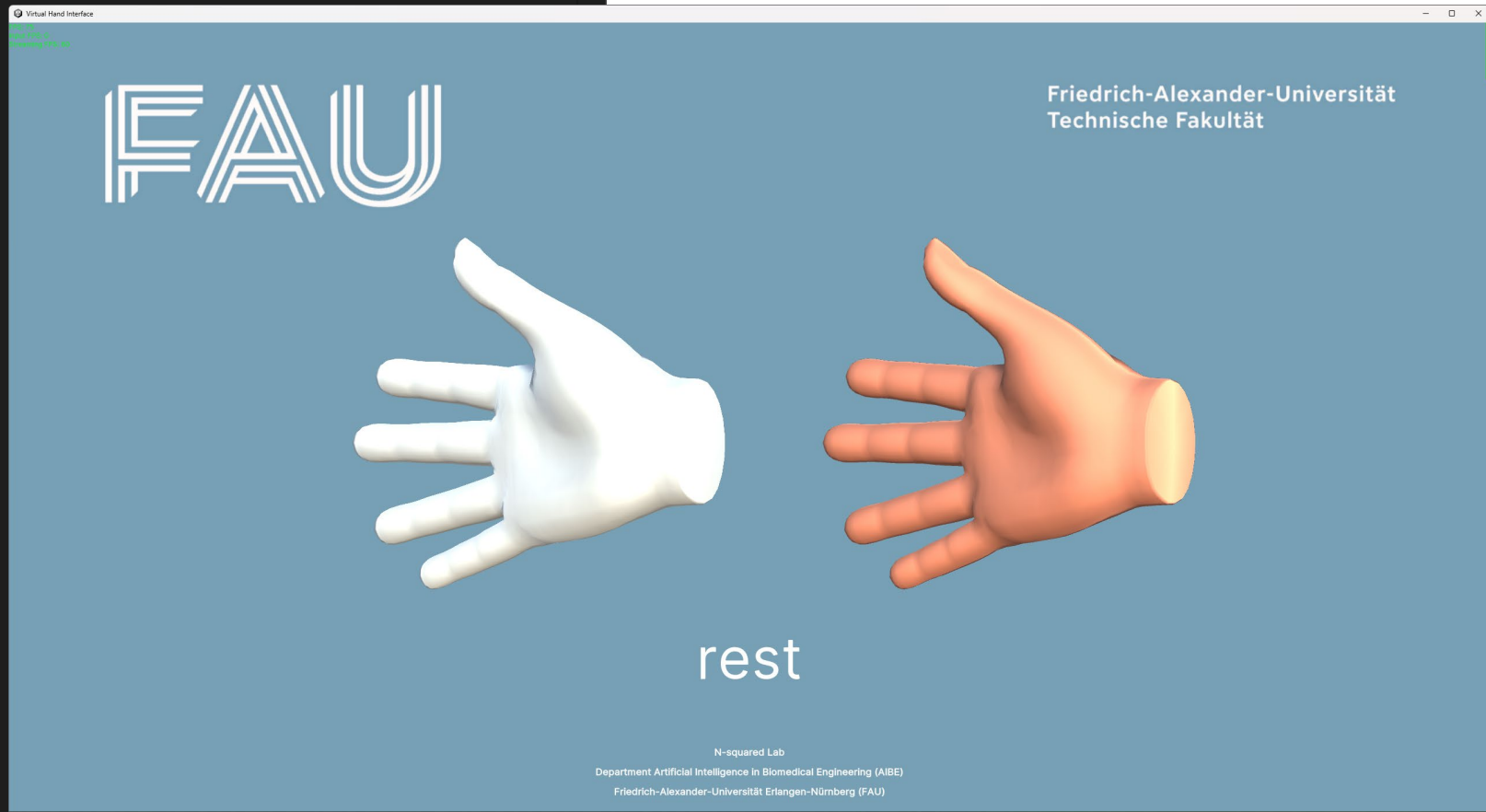
Commands

Connect

Configure

Stream

If it works the red dot will turn green



Logging

FPS:

INFO : MyoGestic started

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IP 192.168.14.17 Update

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Detection Mode Monopolar - Low Gain

Commands

Connect

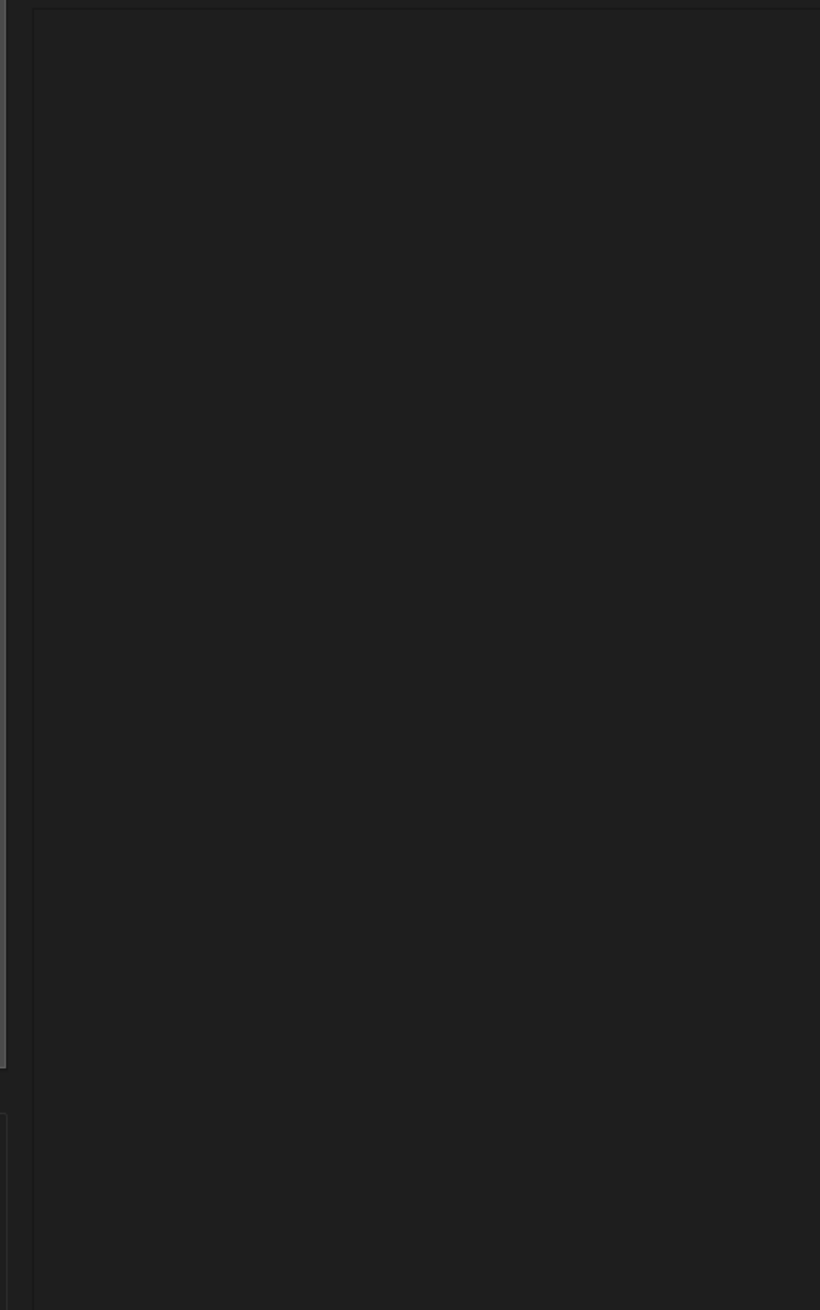
Configure

Stream

Logging

FPS:

INFO : MyoGestic started

 Toggle Plot

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Stream

Devices Protocol

Virtual Hand Interface

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Biosignal Device Interface

Device Muovi

Connection parameters

IP 192.168.14.17 Update

Port 54321

Input Parameters

Working Mode EMG

Detection Mode Monopolar - Low Gain

Commands

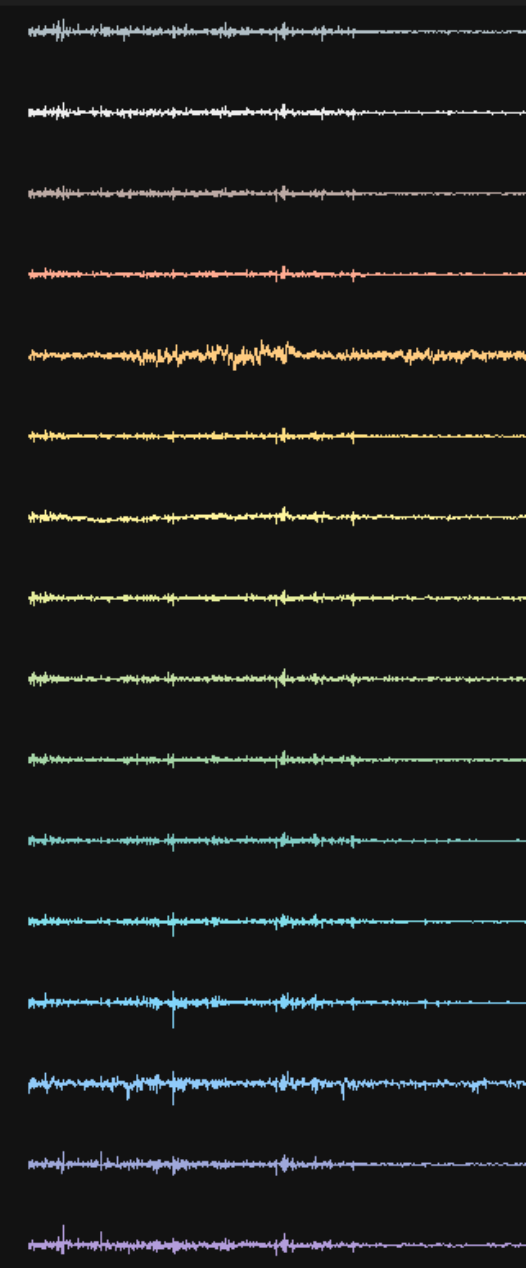
Disconnect

Configure

Stop Streaming

Toggle Plot

- Line 14
- Line 15
- Line 16
- Line 17
- Line 18
- Line 19
- Line 20
- Line 21
- Line 22
- Line 23
- Line 24
- Line 25
- Line 26
- Line 27
- Line 28
- Line 29



Logging

FPS:

INFO : MyoGestic started

Logging

FPS:

INFO : MyoGestic started

Logging

FPS: FPS: 331

INFO : MyoGestic started

MyoGestic - n-squared lab @ AIBE @ FAU

Devices Protocol

Virtual Hand Interface

Close Use external Virtual Hand Interface

Biosignal Device Interface

Device Muovi

Connection parameters

IP 192.168.14.17 Update

Port 54321

Input Parameters

Working Mode EMG

Detection Mode Monopolar - Low Gain

Commands

Disconnect

Configure

Stop Streaming

Logging

FPS: FPS: 331

INFO : MyoGestic started

MyoGestic - n-squared lab @ AIBE @ FAU

Devices Protocol

Mode

Record Training Online

Record

Task Rest

Duration 10

Use Kinematics of Virtual Hand Interface

Record

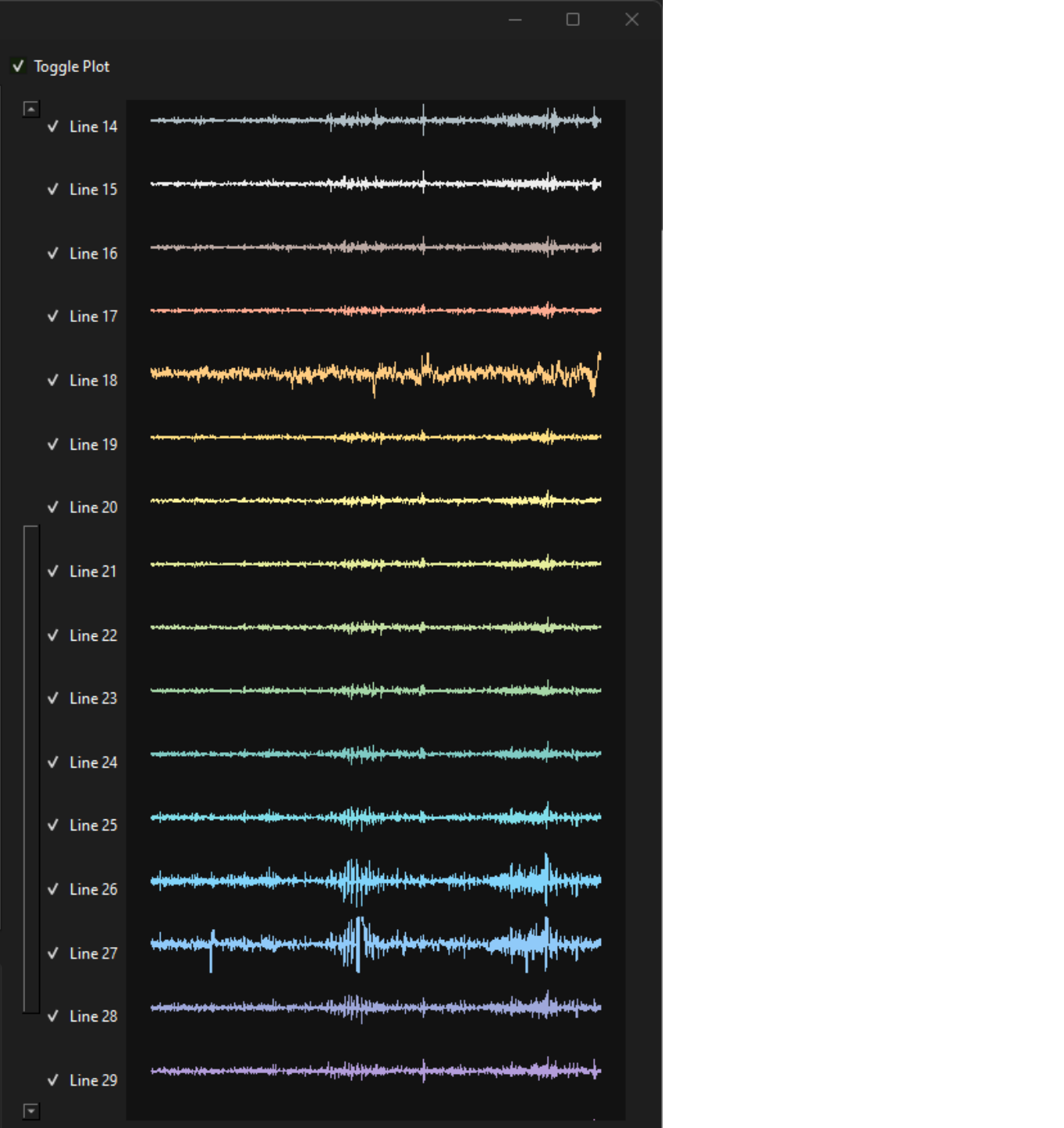
0%

0%

Logging

FPS: FPS: 152

INFO : MyoGestic started



MyoGestic - n-squared lab @ AIBE @ FAU

Devices **Protocol**

Virtual Hand Interface

Close Use external Virtual Hand Interface

Biosignal Device Interface

Device **Muovi**

Connection parameters

IP **192.168.14.17** Update

Port **54321**

Input Parameters

Working Mode **EMG**

Detection Mode **Monopolar - Low Gain**

Commands

Disconnect

Configure

Stop Streaming

MyoGestic - n-squared lab @ AIBE @ FAU

Devices Protocol

Mode

Record Training Online

Record

Task **Rest**

Duration **10**

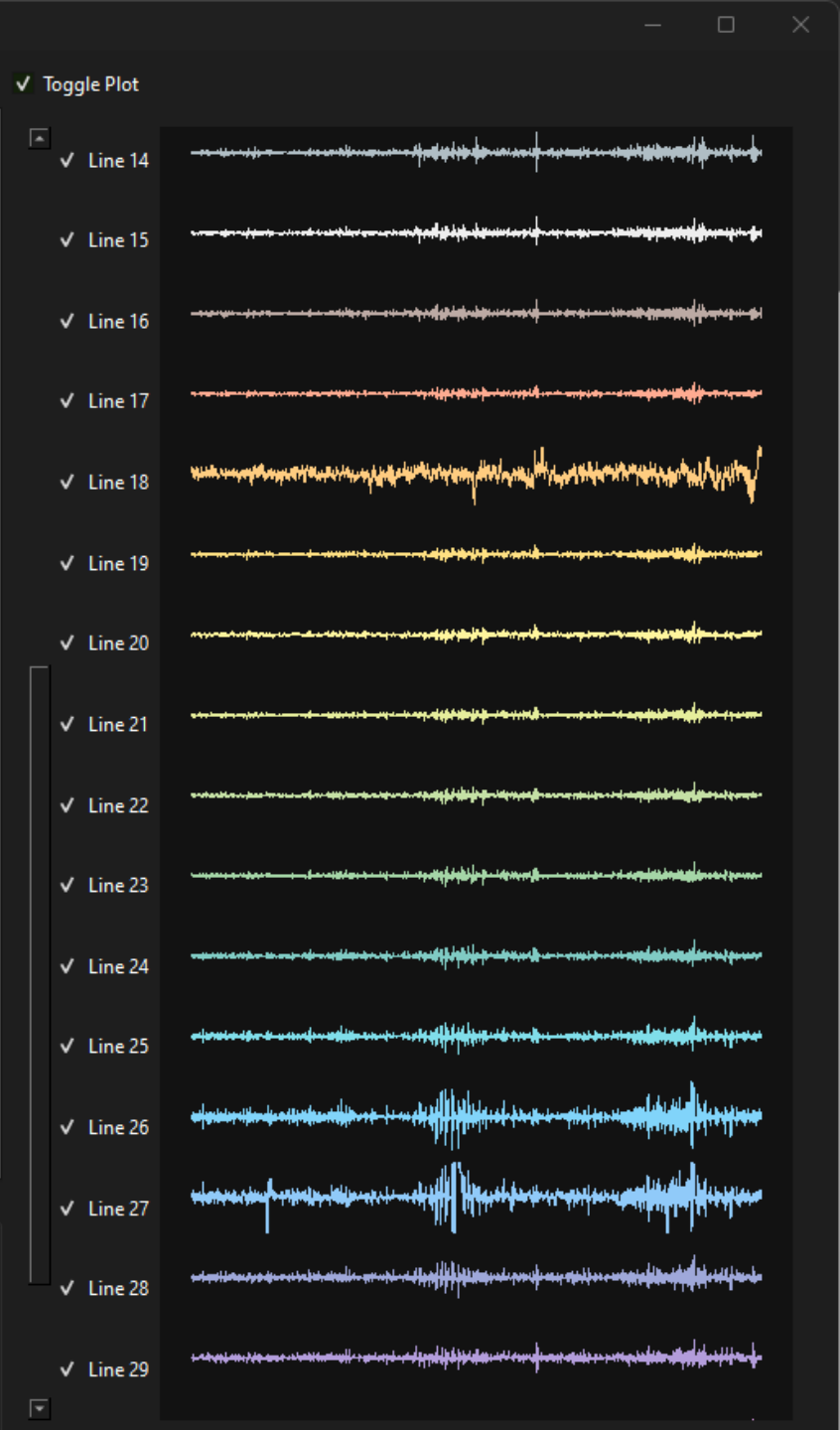
Use Kinematics of Virtual Hand Interface

Record

0%

0%

Select what to record



Logging

FPS: **FPS: 331**

INFO : MyoGestic started

Logging

FPS: **FPS: 152**

INFO : MyoGestic started

MyoGestic - n-squared lab @ AIBE @ FAU

Devices Protocol

Virtual Hand Interface

Close Use external Virtual Hand Interface

Biosignal Device Interface

Device Muovi

Connection parameters

IP 192.168.14.17 Update

Port 54321

Input Parameters

Working Mode EMG

Detection Mode Monopolar - Low Gain

Commands

Disconnect

Configure

Stop Streaming

MyoGestic - n-squared lab @ AIBE @ FAU

Devices Protocol

Mode

Record Training Online

Record

Task Rest

Duration 10

Use Kinematics of Virtual Hand Interface

Record

0%

0%

Select what to record

MyoGestic - n-squared lab @ AIBE @ FAU

Toggle Plot

Virtual Hand Interface

FAU

Friedrich-Alexander-Universität
Technische Fakultät

rest

N-squared Lab
Department Artificial Intelligence in Biomedical Engineering (AIBE)
Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Logging

FPS: FPS: 331

INFO : MyoGestic started

Logging

FPS: FPS: 152

INFO : MyoGestic started

Line 23

Line 24

Line 25

Line 26

Line 27

Line 28

Line 29

Setup participant interface for guidance to match the recording

← → to select movement

↑ to stop movement

↓ to start movement

MyoGestic - n-squared lab @ AIBE @ FAU

Devices Protocol

Virtual Hand Interface

Close Use external Virtual Hand Interface

Biosignal Device Interface

Device Muovi

Connection parameters

IP 192.168.14.17 Update

Port 54321

Input Parameters

Working Mode EMG

Detection Mode Monopolar - Low Gain

Commands

Disconnect

Configure

Stop Streaming

MyoGestic - n-squared lab @ AIBE @ FAU

Devices Protocol

Mode

Record Training Online

Record

Task Rest

Duration 10

Use Kinematics of Virtual Hand Interface

Record

0%

0%

Select what to record

Record as many DoFs as desired

MyoGestic - n-squared lab @ AIBE @ FAU

Toggle Plot

Virtual Hand Interface

FAU

Friedrich-Alexander-Universität Technische Fakultät

rest

N-squared Lab
Department Artificial Intelligence in Biomedical Engineering (AIBE)
Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Logging

FPS: FPS: 331

INFO : MyoGestic started

Logging

FPS: FPS: 152

INFO : MyoGestic started

Setup participant interface for guidance to match the recording

← → to select movement
↑ to stop movement
↓ to start movement

Line 23

Line 24

Line 25

Line 26

Line 27

Line 28

Line 29

MyoGestic - n-squared lab @ AIBE @ FAU

Devices Protocol

Virtual Hand Interface

Close Use external Virtual Hand Interface

Biosignal Device Interface

Device Muovi

Connection parameters

IP 192.168.14.17 Update

Port 54321

Input Parameters

Working Mode EMG

Detection Mode Monopolar - Low Gain

Commands

Disconnect

Configure

Stop Streaming

MyoGestic - n-squared lab @ AIBE @ FAU

Devices Protocol

Mode

Record Training Online

Record

Task Rest

Duration 10

Use Kinematics of Virtual Hand Interface

Record

0%

0%

Select what to record

Record as many DoFs as desired

Toggle Plot

Virtual Hand Interface

FAU

Friedrich-Alexander-Universität Technische Fakultät

rest

N-squared Lab
Department Artificial Intelligence in Biomedical Engineering (AIBE)
Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Line 23

Line 24

Line 25

Line 26

Line 27

Line 28

Line 29

Setup participant interface for guidance to match the recording

← → to select movement

↑ to stop movement

↓ to start movement

Logging

FPS: FPS: 331

INFO : MyoGestic started

Logging

FPS: FPS: 152

INFO : MyoGestic started

Devices Protocol

Toggle Plot

Mode

Record Training Online

Create Training Dataset

Select Recordings

Task	Recorded Time	Labels

Remove Item

Remove All

Dataset Label

Select Features

Create Dataset

Train Model

Select Dataset

No dataset selected!

Model Catboost Regressor Per Finger

Change Parameters

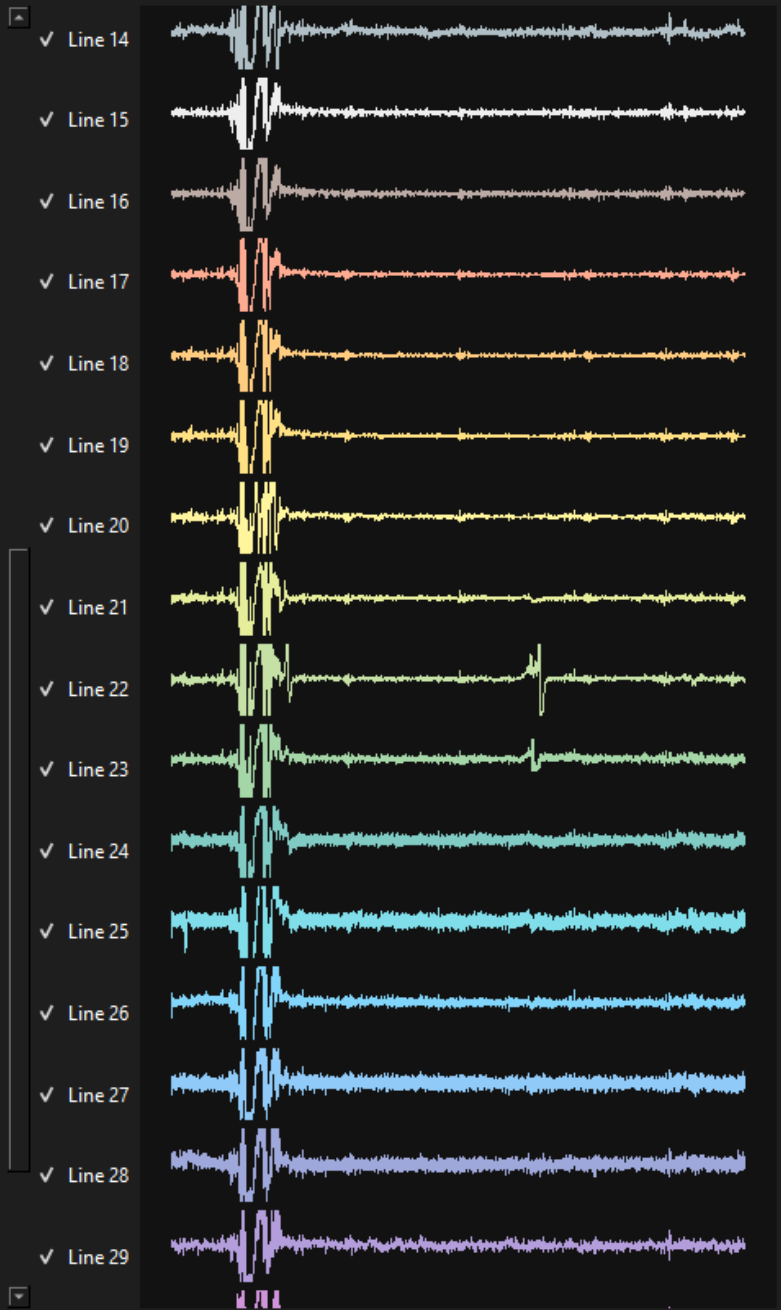
Model Label

Train

Logging

FPS: FPS: 276

INFO : MyoGestic started



Devices Protocol

Mode

Record
 Training
 Online

Create Training Dataset

Select Recordings

Task	Recorded Time	Labels

Remove Item Remove All

Dataset Label

Select Features Create Dataset

Train Model

Select Dataset No dataset selected!

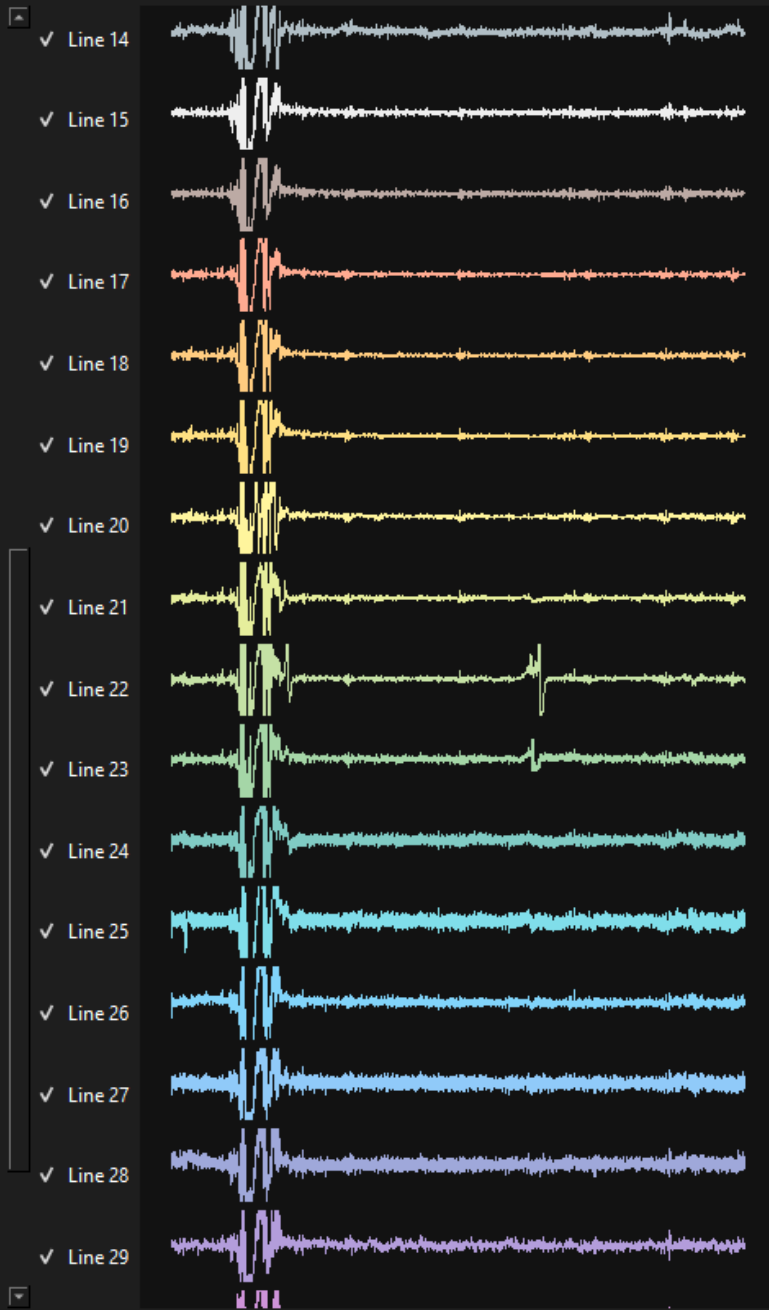
Model Catboost Regressor Per Finger

Change Parameters

Model Label

Train

Toggle Plot



Logging

FPS: FPS: 276

INFO : MyoGestic started

Open

Simpetru, Raul > code > MyoGestic - Gitlab > myogestic > data > recordings

Name	Date modified	Type	Size
MindMove_Recording_20241010_2006269...	10/10/2024 20:06	PKL File	32.644 KB
MindMove_Recording_20241010_2006382...	10/10/2024 20:06	PKL File	32.644 KB

Select recordings made

File name: MindMove_Recording_20241010_200638276379_fist_default.pkl

All Files (*)

Open Cancel

Devices Protocol

Mode

Record Training Online

Create Training Dataset

Select Recordings

Task	Recorded Time	Labels
Rest	10	default
Fist	10	default

Remove Item Remove All

Dataset Label

Select Features Create Dataset

Train Model

Select Dataset No dataset selected!

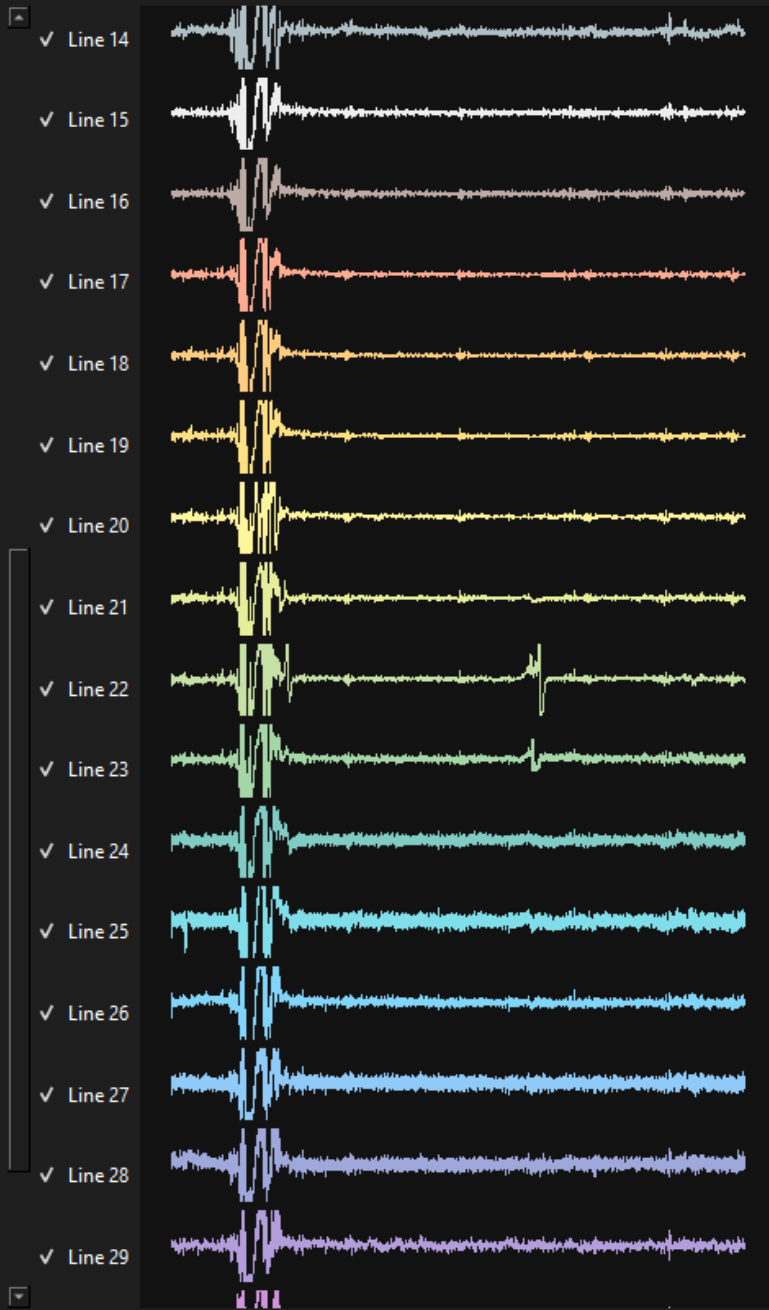
Model Catboost Regressor Per Finger

Change Parameters

Model Label

Train

Toggle Plot



Logging

FPS: FPS: 276

INFO : MyoGestic started

Open

Simpetru, Raul > code > MyoGestic - Gitlab > myogestic > data > recordings

Organize New folder

Name	Date modified	Type	Size
MindMove_Recording_20241010_2006269...	10/10/2024 20:06	PKL File	32.644 KB
MindMove_Recording_20241010_2006382...	10/10/2024 20:06	PKL File	32.644 KB

Select recordings made

File name: MindMove_Recording_20241010_200638276379_fist_default.pkl

All Files (*)

Open Cancel

Devices Protocol

Mode

Record Training Online

Create Training Dataset

Select Recordings

Task	Recorded Time	Labels
------	---------------	--------

Remove Item Remove All

Dataset Label

Select Features **Create Dataset**

Train Model

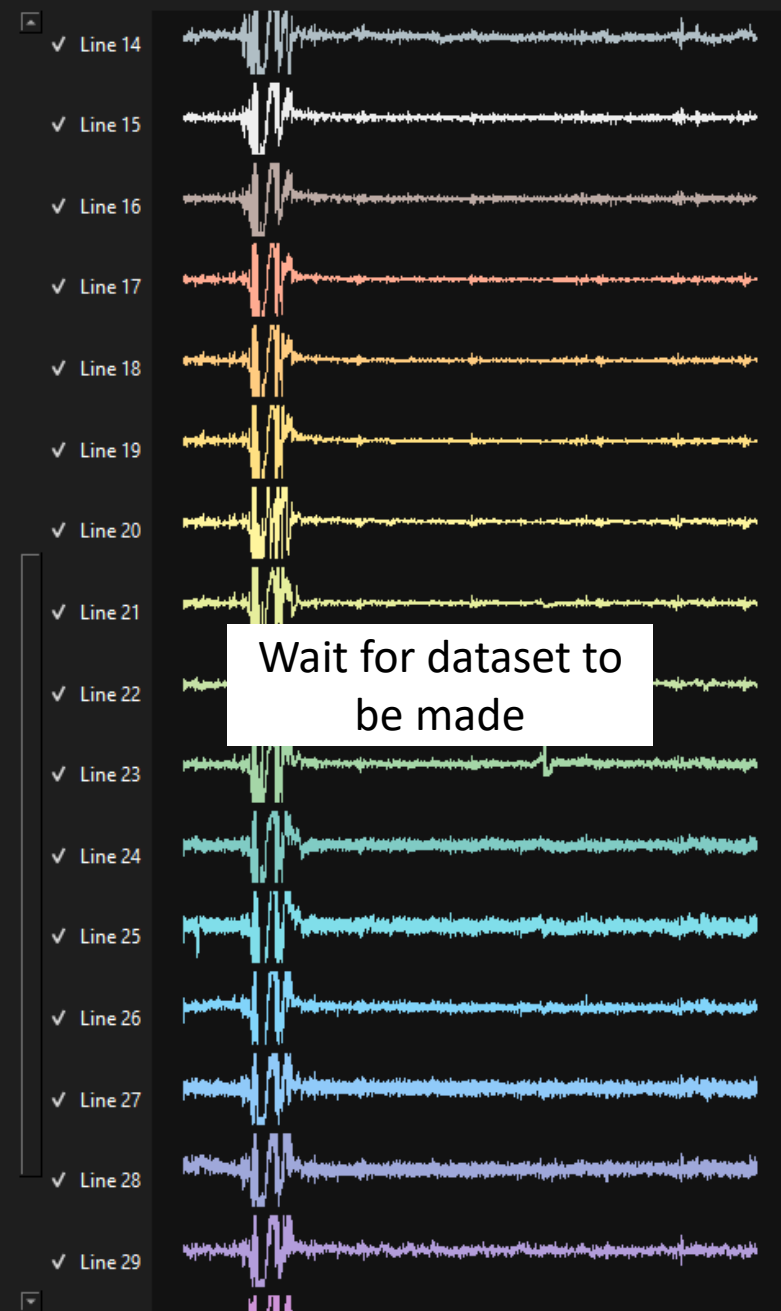
Select Dataset No dataset selected!

Model Catboost Regressor Per Finger

Change Parameters

Model Label

Train

 Toggle Plot

Open

Simpetru, Raul > code > MyoGestic - Gitlab > myogestic > data > recordings

Organize New folder

Name	Date modified	Type	Size
MindMove_Recording_20241010_2006269...	10/10/2024 20:06	PKL File	32.644 KB
MindMove_Recording_20241010_2006382...	10/10/2024 20:06	PKL File	32.644 KB

File name: MindMove_Recording_20241010_200638276379_fist_default.pkl

All Files (*)

Open Cancel

Select recordings made

Devices Protocol

Mode

Record Training Online

Create Training Dataset

Select Recordings

Task	Recorded Time	Labels
------	---------------	--------

Remove Item Remove All

Dataset Label

Select Features **Create Dataset**

Train Model

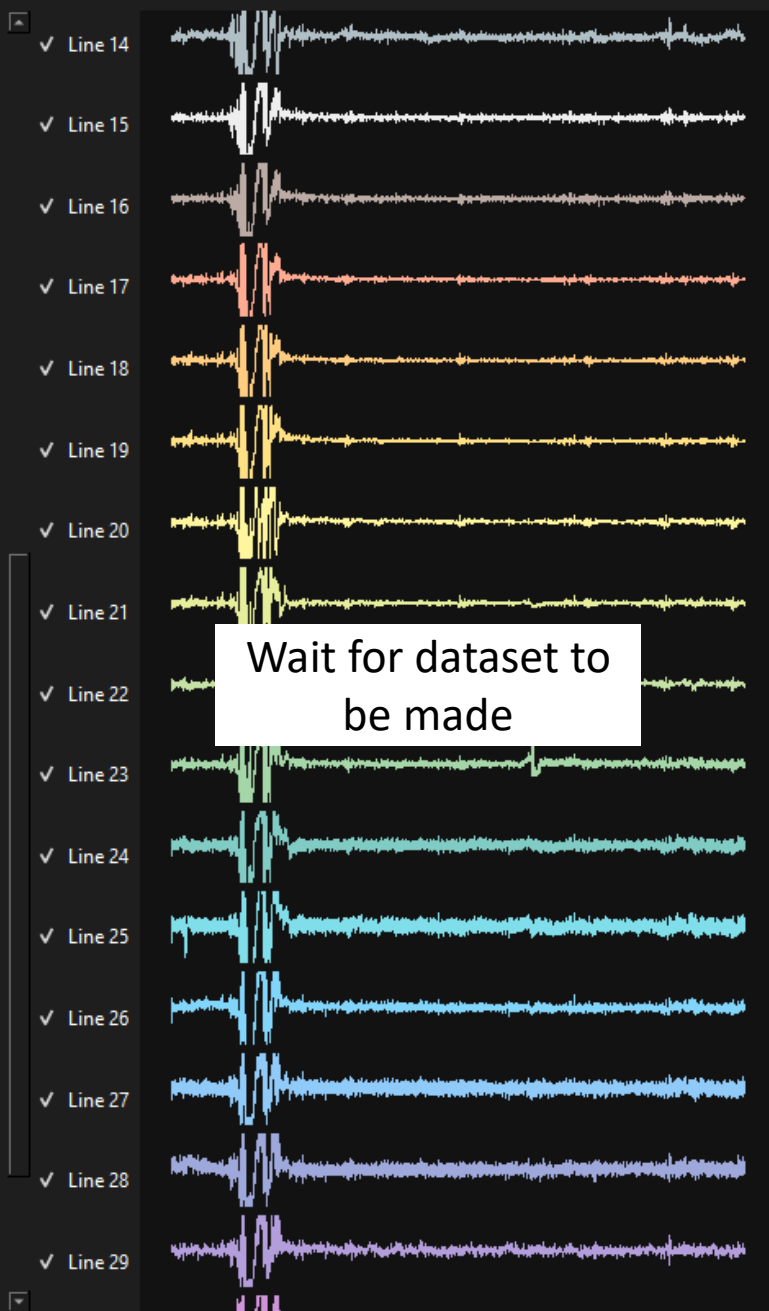
Select Dataset No dataset selected!

Model Catboost Regressor Per Finger

Change Parameters

Model Label

Train

 Toggle Plot

Open

Simpetru, Raul > code > MyoGestic - Gitlab > myogestic > data > recordings

Organize New folder

Name	Date modified	Type	Size
MindMove_Recording_20241010_2006269...	10/10/2024 20:06	PKL File	32.644 KB
MindMove_Recording_20241010_2006382...	10/10/2024 20:06	PKL File	32.644 KB

Desktop Downloads Documents Pictures code work papers Music Videos cyf8yzyk results Bracelet CLIP Learning

Synology Drive - DS223 This PC datasets (nsquared-nas)

File name: MindMove_Recording_20241010_200638276379_fist_default.pkl All Files (*)

Open Cancel

Select recordings made

Logging

FPS: FPS: 276

```
INFO : MyoGestic started
MindMove_Dataset_20241029_074144836633_default.pkl
created!
```

Devices Protocol

Mode

Record
 Training
 Online

Create Training Dataset

Select Recordings

Task	Recorded Time	Labels

Remove Item Remove All

Dataset Label

Select Features Create Dataset

Train Model

Select Dataset No dataset selected!

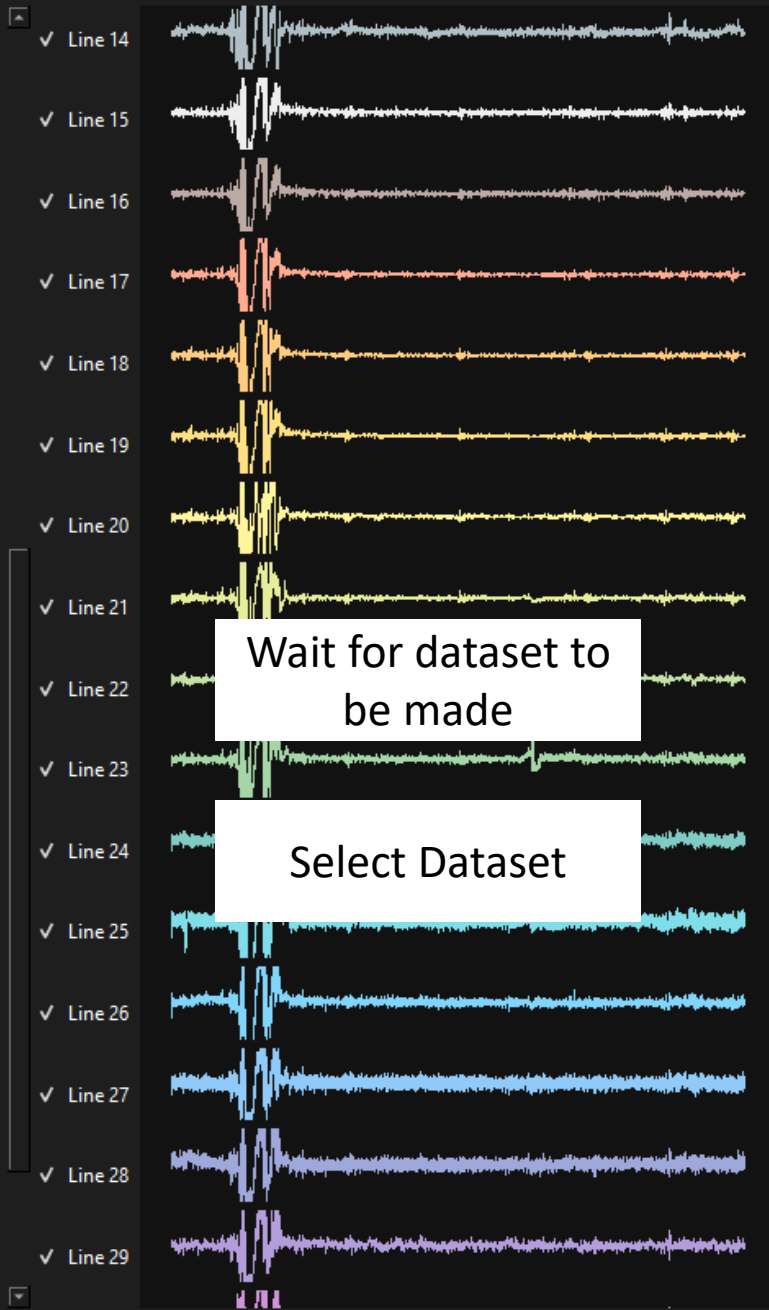
Model Catboost Regressor Per Finger

Change Parameters

Model Label

Train

Toggle Plot



Wait for dataset to be made

Select Dataset

Logging

FPS: FPS: 276

```
INFO : MyoGestic started
MindMove_Dataset_20241029_074144836633_default.pkl created!
```

Open

Simpetru, Raul > code > MyoGestic - Gitlab > myogestic > data > recordings

Name	Date modified	Type	Size
MindMove_Recording_20241010_2006269...	10/10/2024 20:06	PKL File	32.644 KB
MindMove_Recording_20241010_2006382...	10/10/2024 20:06	PKL File	32.644 KB

Select recordings made

File name: MindMove_Recording_20241010_200638276379_fist_default.pkl

All Files (*)

Open Cancel

Devices Protocol

Mode

Record Training Online

Create Training Dataset

Select Recordings

Task	Recorded Time	Labels

Remove Item Remove All

Dataset Label

Select Features Create Dataset

Train Model

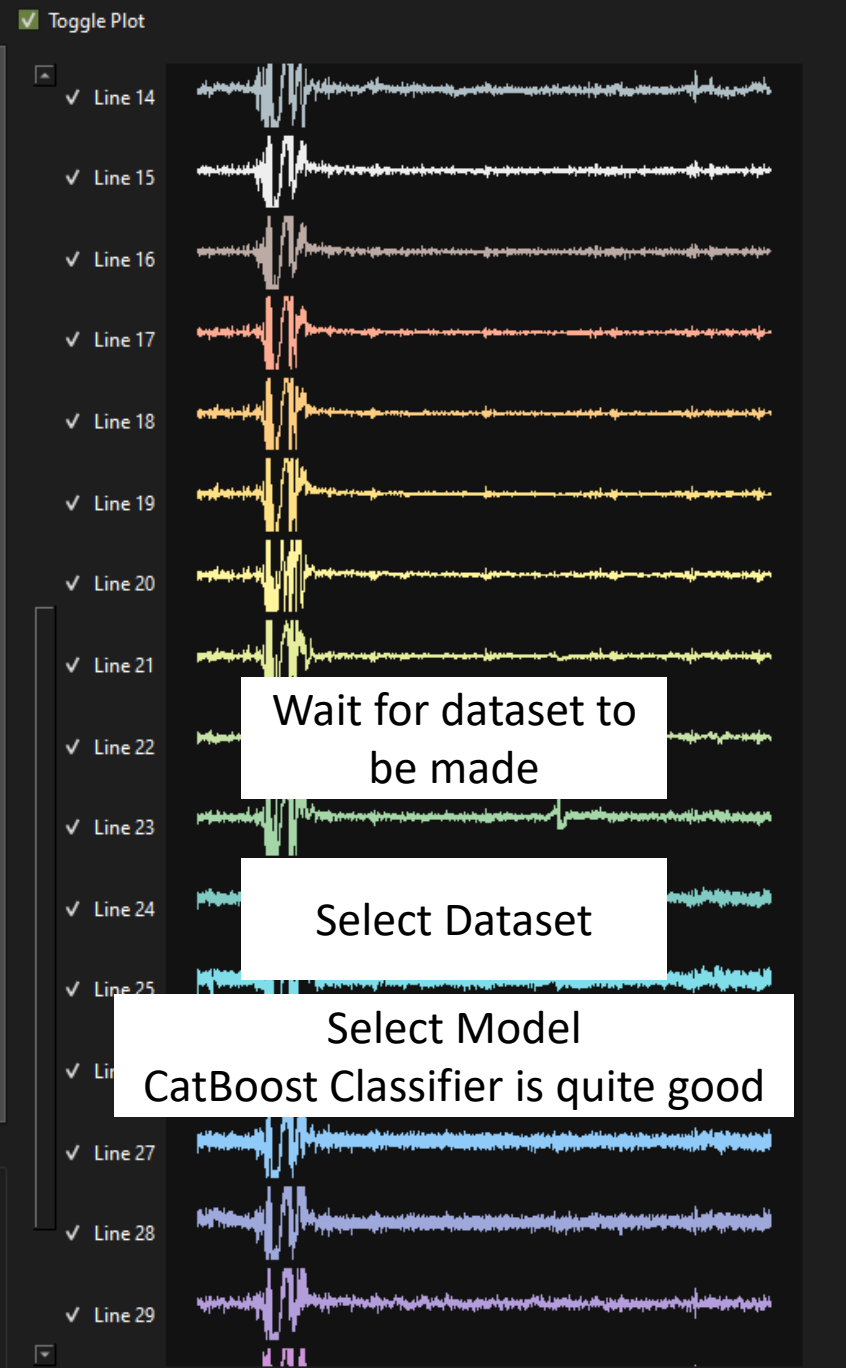
Select Dataset No dataset selected!

Model **Catboost Regressor Per Finger**

Change Parameters

Model Label

Train



Wait for dataset to be made

Select Dataset

Select Model
CatBoost Classifier is quite good

Logging

FPS: FPS: 276

```
INFO : MyoGestic started
MindMove_Dataset_20241029_074144836633_default.pkl created!
```

Open

Simpetru, Raul > code > MyoGestic - Gitlab > myogestic > data > recordings

Organize New folder

Name	Date modified	Type	Size
MindMove_Recording_20241010_2006269...	10/10/2024 20:06	PKL File	32.644 KB
MindMove_Recording_20241010_2006382...	10/10/2024 20:06	PKL File	32.644 KB

Select recordings made

File name: MindMove_Recording_20241010_200638276379_fist_default.pkl

All Files (*)

Open Cancel

Devices Protocol

Mode

Record Training Online

Create Training Dataset

Select Recordings

Task	Recorded Time	Labels
------	---------------	--------

Remove Item Remove All

Dataset Label

Select Features Create Dataset

Train Model

Select Dataset No dataset selected!

Model Catboost Regressor Per Finger

Change Parameters

Model Label

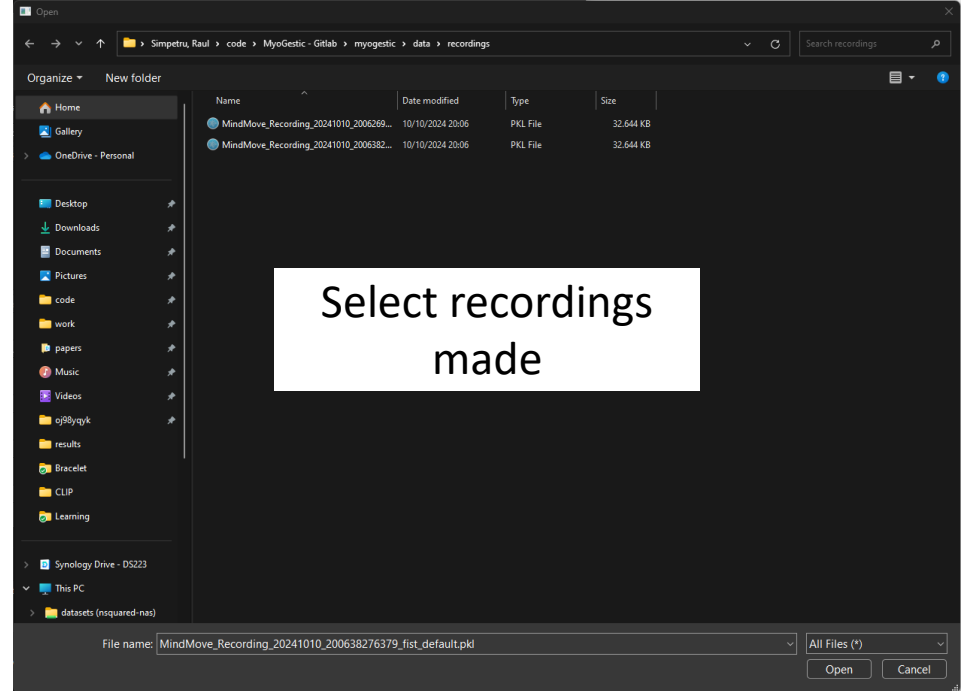
Train



Wait for dataset to be made

Select Dataset

Select Model
CatBoost Classifier is quite good



Logging

FPS: FPS: 276

```
INFO : MyoGestic started
MindMove_Dataset_20241029_074144836633_default.pkl created!
```

Devices Protocol

Mode

Record Training Online

Create Training Dataset

Select Recordings

Task	Recorded Time	Labels
------	---------------	--------

Remove Item Remove All

Dataset Label

Select Features Create Dataset

Train Model

Select Dataset No dataset selected!

Model Catboost Regressor Per Finger

Change Parameters

Model Label

Train



Wait for dataset to be made

Select Dataset

Select Model
CatBoost Classifier is quite good

Logging

FPS: FPS: 276

```
INFO : MyoGestic started
MindMove_Dataset_20241029_074144836633_default.pkl created!
```

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Simpetru, Raul > code > MyoGestic - Gitlab > myogestic > data > recordings

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MindMove_Recording_20241010_2006269...	10/10/2024 20:06	PKL File	32.644 KB
MindMove_Recording_20241010_2006382...	10/10/2024 20:06	PKL File	32.644 KB

Select recordings made

File name: MindMove_Recording_20241010_200638276379_fist_default.pkl

All Files (*)

Open Cancel

Devices Protocol

Mode

 Record Training Online

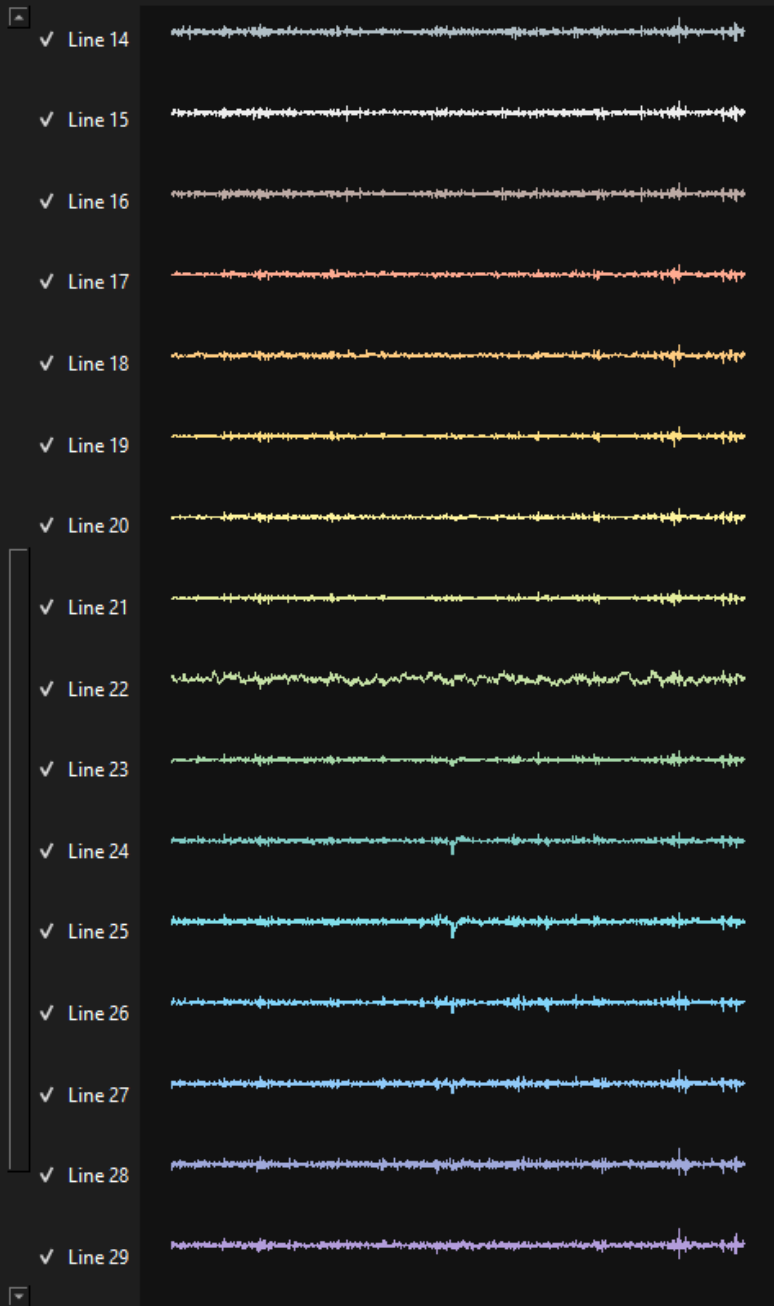
Load Model

 No models loaded!

Conformal Prediction

Type Alpha Solving method Kernel Size

Commands

 Toggle Plot

Logging

FPS: FPS: 206

INFO : 999: learn: 0.0000352 total:
32.5s remaining: 0us

Devices Protocol

Toggle Plot

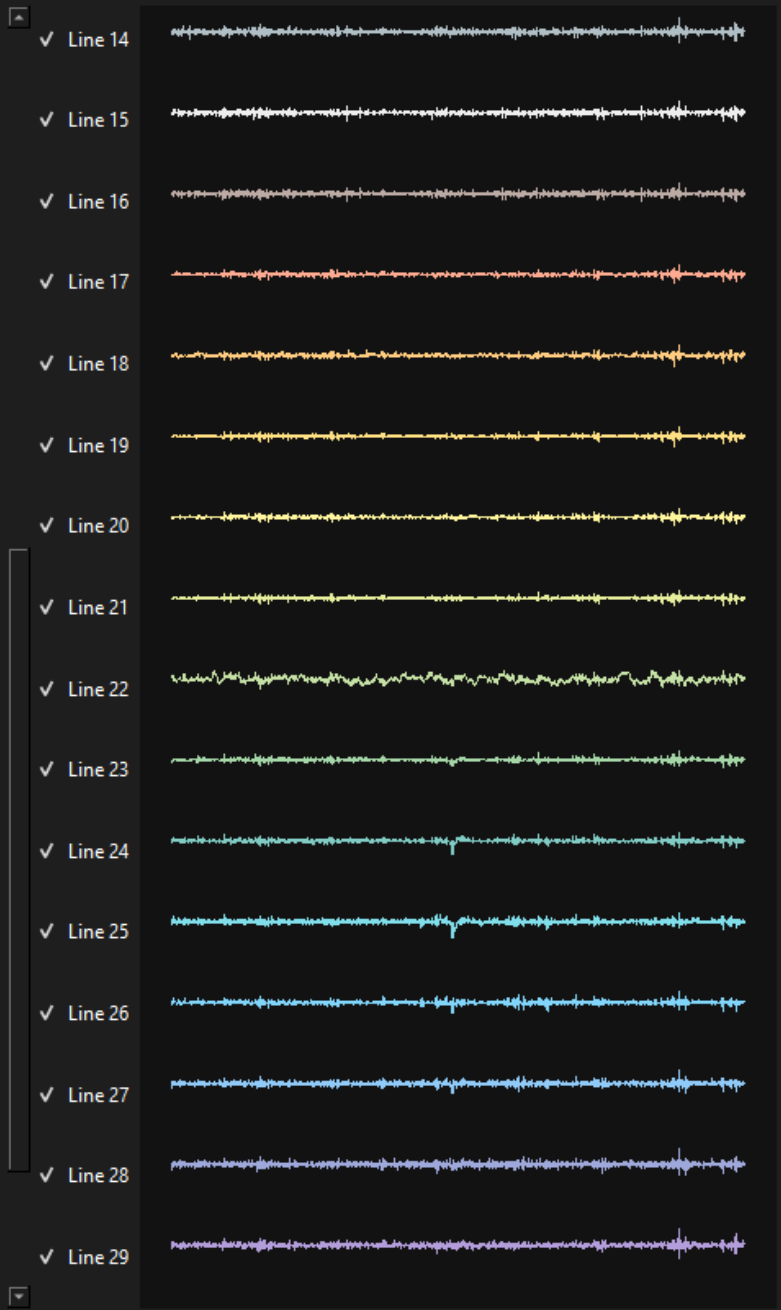
Mode
 Record Training Online

Load Model
 No models loaded!

Conformal Prediction
Type: None
Alpha: 0,10
Solving method: Mode
Kernel Size: 5

Commands

Logging
FPS: FPS: 206
INFO : 999: learn: 0.0000352 total:
32.5s remaining: 0us



Devices Protocol

Toggle Plot

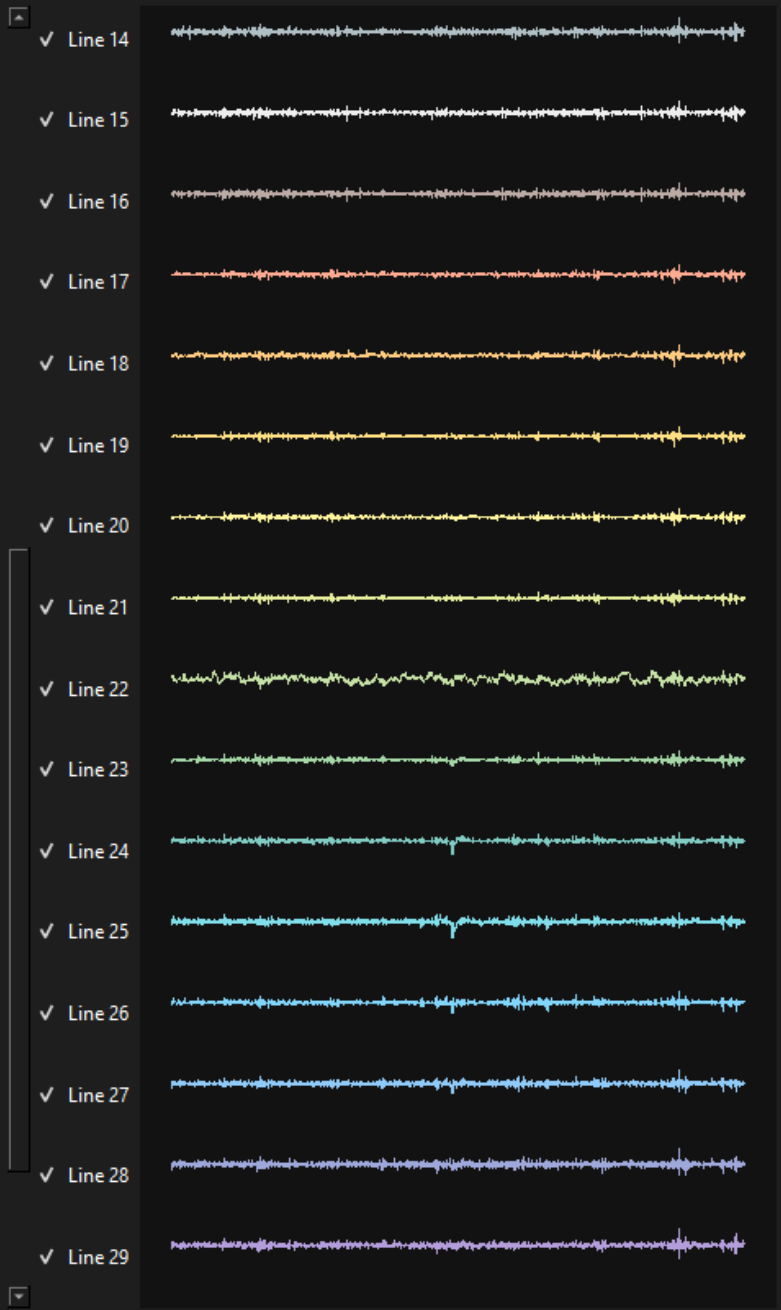
Mode
 Record Training Online

Load Model
 default loaded!

Conformal Prediction
Type: None
Alpha: 0,10
Solving method: Mode
Kernel Size: 5

Commands

Logging
FPS: FPS: 206
INFO : 999: learn: 0.0000352 total:
32.5s remaining: 0us



Devices Protocol

Mode

Record Training Online

Load Model

Select Model default loaded!

Conformal Prediction

Type None

Alpha 0,10

Solving method Mode

Kernel Size 5

Set

Commands

Start Prediction

Start Recording

Toggle Plot

Line 14

Line 15

Line 16

Line 17

Line 18

Line 19

Line 20

Line 21

Line 22

Line 23

Line 24

Line 25

Line 26

Line 27

Line 28

Line 29



Logging

FPS: FPS: 206

INFO : 999: learn: 0.0000352 total: 32.5s remaining: 0us