

API Reference

# perceptron-aas

API Version: 1.0

Train perceptrons as a service

## CONTACT

NAME: Jaime

EMAIL: [work@jaimecgomezz.com](mailto:work@jaimecgomezz.com)

URL: <https://github.com/jaimecgomezz>

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# API

## 1. PREDICT

### 1.1 POST /predict

Make a prediction with a trained perceptron

#### REQUEST

REQUEST BODY - application/json

```
{
  input*           [number]
  config* {
    A Perceptron configuration
    alpha*         number    DEFAULT:0.1
                        The adjustment made to the weights on each iteration
    dimension*      number    DEFAULT:1
                        The number of inputs provided to the Perceptron
    weights         [number]
  }
}
```

#### RESPONSE

STATUS CODE - 200: Resulting prediction from a Perceptron

RESPONSE MODEL - application/json

```
{
  result* number The resulting prediction
}
```

STATUS CODE - 500: Error response

RESPONSE MODEL - application/json

```
{
  error* {
    Error descriptor
    message* string The error message
    backtrace* [string]
  }
}
```

---

## 2. STEP

### 2.1 POST /step

#### Step

Step the Perceptron training

#### REQUEST

REQUEST BODY - application/json

```
{
  inputs* [{
    Array of object:
  }]
  targets* [number]
  config* {
    A Perceptron configuration
    alpha* number DEFAULT:0.1
    The adjustment made to the weights on each iteration
    dimension* number DEFAULT:1
    The number of inputs provided to the Perceptron
    weights [number]
  }
}
```

#### RESPONSE

STATUS CODE - 200: Trained perceptron result

RESPONSE MODEL - application/json

```
{
  result* {
    A Perceptron configuration
    alpha* number DEFAULT:0.1
    The adjustment made to the weights on each iteration
    dimension* number DEFAULT:1
    The number of inputs provided to the Perceptron
    weights [number]
  }
}
```

STATUS CODE - 500: Error response

RESPONSE MODEL - application/json

```
{
  error* {
    Error descriptor
    message* string The error message
    backtrace* [string]
  }
}
```

---

## 3. TRAIN

### 3.1 POST /train

#### Train

Train a Perceptron with the provided configuration

#### REQUEST

##### REQUEST BODY - application/json

```
{
  inputs* [{
    Array of object:
  }]
  targets* [number]
  config* {
    A Perceptron configuration
    alpha* number DEFAULT:0.1
    The adjustment made to the weights on each iteration
    dimension* number DEFAULT:1
    The number of inputs provided to the Perceptron
    weights [number]
  }
}
```

#### RESPONSE

##### STATUS CODE - 200: Trained perceptron result

##### RESPONSE MODEL - application/json

```
{
  result* {
    A Perceptron configuration
    alpha* number DEFAULT:0.1
    The adjustment made to the weights on each iteration
    dimension* number DEFAULT:1
    The number of inputs provided to the Perceptron
    weights [number]
  }
}
```

##### STATUS CODE - 500: Error response

##### RESPONSE MODEL - application/json

```
{
  error* {
    Error descriptor
    message* string The error message
    backtrace* [string]
  }
}
```