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playground.tensorflow.org

Panel 1

Epoch **001,019**

Learning rate: 10 | Activation: Sigmoid | Regularization: None | Regularization rate: 0 | Problem type: Classification

DATA
Which dataset do you want to use?
Ratio of training to test data: 70%
Noise: 0
Batch size: 10
REGENERATE

FEATURES
Which properties do you want to feed in?
X_1
X_2
X_1^2
X_2^2
X_1X_2
$sin(X_1)$
$sin(X_2)$

0 HIDDEN LAYERS

OUTPUT
Test loss 0.000
Training loss 0.000

Colors shows data, neuron and weight values.

☑ Show test data ☑ Discretize output

Panel 2

Epoch **001,023**

Learning rate: 10 | Activation: Sigmoid | Regularization: None | Regularization rate: 0 | Problem type: Classification

DATA
Which dataset do you want to use?
Ratio of training to test data: 70%
Noise: 0
Batch size: 10
REGENERATE

FEATURES
Which properties do you want to feed in?
X_1
X_2
X_1^2
X_2^2
X_1X_2
$sin(X_1)$
$sin(X_2)$

0 HIDDEN LAYERS

OUTPUT
Test loss 0.000
Training loss 0.000

Colors shows data, neuron and weight values.

☑ Show test data ☑ Discretize output

Panel 3

Epoch **001,029**

Learning rate: 10 | Activation: Sigmoid | Regularization: None | Regularization rate: 0 | Problem type: Classification

DATA
Which dataset do you want to use?
Ratio of training to test data: 70%
Noise: 0
Batch size: 10
REGENERATE

FEATURES
Which properties do you want to feed in?
X_1
X_2
X_1^2
X_2^2
X_1X_2
$sin(X_1)$
$sin(X_2)$

0 HIDDEN LAYERS

OUTPUT
Test loss 0.682
Training loss 0.752

Colors shows data, neuron and weight values.

☑ Show test data ☑ Discretize output

Panel 1

Epoch **001,030**

Learning rate: 10
Activation: Linear
Regularization: None
Regularization rate: 0
Problem type: Classification

DATA
Which dataset do you want to use?

Ratio of training to test data: 70%
Noise: 0
Batch size: 10

REGENERATE

FEATURES
Which properties do you want to feed in?

X₁
X₂
X₁²
X₂²
X₁X₂
sin(X₁)
sin(X₂)

0 HIDDEN LAYERS

OUTPUT
Test loss 0.000
Training loss 0.000

Colors shows data, neuron and weight values.
-1 0 1

☑ Show test data   ☑ Discretize output

Panel 2

Epoch **001,021**

Learning rate: 10
Activation: Linear
Regularization: None
Regularization rate: 0
Problem type: Classification

DATA
Which dataset do you want to use?

Ratio of training to test data: 70%
Noise: 0
Batch size: 10

REGENERATE

FEATURES
Which properties do you want to feed in?

X₁
X₂
X₁²
X₂²
X₁X₂
sin(X₁)
sin(X₂)

0 HIDDEN LAYERS

OUTPUT
Test loss 0.000
Training loss 0.000

Colors shows data, neuron and weight values.
-1 0 1

☑ Show test data   ☑ Discretize output

Panel 3

Epoch **001,024**

Learning rate: 10
Activation: Linear
Regularization: None
Regularization rate: 0
Problem type: Classification

DATA
Which dataset do you want to use?

Ratio of training to test data: 70%
Noise: 0
Batch size: 10

REGENERATE

FEATURES
Which properties do you want to feed in?

X₁
X₂
X₁²
X₂²
X₁X₂
sin(X₁)
sin(X₂)

0 HIDDEN LAYERS

OUTPUT
Test loss 0.051
Training loss 0.091

Colors shows data, neuron and weight values.
-1 0 1

☑ Show test data   ☑ Discretize output

Panel 1 (Epoch 001,007):

Epoch: 001,007 | Learning rate: 10 | Activation: ReLU | Regularization: None | Regularization rate: 0 | Problem type: Classification

DATA — Which dataset do you want to use?
Ratio of training to test data: 70%
Noise: 0
Batch size: 10
REGENERATE

FEATURES — Which properties do you want to feed in?
X_1 X_2 X_1^2 X_2^2 X_1X_2 $\sin(X_1)$ $\sin(X_2)$

0 HIDDEN LAYERS

OUTPUT
Test loss 0.051
Training loss 0.091
Colors shows data, neuron and weight values.
Show test data | Discretize output

Panel 2 (Epoch 001,024):

Epoch: 001,024 | Learning rate: 10 | Activation: Tanh | Regularization: None | Regularization rate: 0 | Problem type: Classification

DATA — Which dataset do you want to use?
Ratio of training to test data: 70%
Noise: 0
Batch size: 10
REGENERATE

FEATURES — Which properties do you want to feed in?
X_1 X_2 X_1^2 X_2^2 X_1X_2 $\sin(X_1)$ $\sin(X_2)$

0 HIDDEN LAYERS

OUTPUT
Test loss 0.000
Training loss 0.000
Colors shows data, neuron and weight values.
Show test data | Discretize output

Panel 3 (Epoch 001,025):

Epoch: 001,025 | Learning rate: 10 | Activation: Tanh | Regularization: None | Regularization rate: 0 | Problem type: Classification

DATA — Which dataset do you want to use?
Ratio of training to test data: 70%
Noise: 0
Batch size: 10
REGENERATE

FEATURES — Which properties do you want to feed in?
X_1 X_2 X_1^2 X_2^2 X_1X_2 $\sin(X_1)$ $\sin(X_2)$

0 HIDDEN LAYERS

OUTPUT
Test loss 0.000
Training loss 0.000
Colors shows data, neuron and weight values.
Show test data | Discretize output

Panel 1

Epoch
001,019

Learning rate
10

Activation
Tanh

Regularization
None

Regularization rate
0

Problem type
Classification

DATA
Which dataset do you want to use?

Ratio of training to test data: 70%

Noise: 0

Batch size: 10

REGENERATE

FEATURES
Which properties do you want to feed in?

X_1
X_2
X_1^2
X_2^2
X_1X_2
$\sin(X_1)$
$\sin(X_2)$

+ − 0 HIDDEN LAYERS

OUTPUT
Test loss 0.091
Training loss 0.137

Colors shows data, neuron and weight values.

−1 0 1

☑ Show test data   ☑ Discretize output

Panel 2

Epoch
001,064

Learning rate
10

Activation
Tanh

Regularization
None

Regularization rate
0

Problem type
Classification

DATA
Which dataset do you want to use?

Ratio of training to test data: 70%

Noise: 0

Batch size: 10

REGENERATE

FEATURES
Which properties do you want to feed in?

X_1
X_2
X_1^2
X_2^2
X_1X_2
$\sin(X_1)$
$\sin(X_2)$

+ − 0 HIDDEN LAYERS

OUTPUT
Test loss 0.051
Training loss 0.091

Colors shows data, neuron and weight values.

−1 0 1

☑ Show test data   ☑ Discretize output

Panel 3

Epoch
001,021

Learning rate
10

Activation
ReLU

Regularization
None

Regularization rate
0

Problem type
Classification

DATA
Which dataset do you want to use?

Ratio of training to test data: 70%

Noise: 0

Batch size: 10

REGENERATE

FEATURES
Which properties do you want to feed in?

X_1
X_2
X_1^2
X_2^2
X_1X_2
$\sin(X_1)$
$\sin(X_2)$

+ − 0 HIDDEN LAYERS

OUTPUT
Test loss 0.000
Training loss 0.000

Colors shows data, neuron and weight values.

−1 0 1

☑ Show test data   ☑ Discretize output

Panel 1 (Epoch 001,032):

	Epoch	Learning rate	Activation	Regularization	Regularization rate	Problem type
	001,032	10	Tanh	None	0	Classification

DATA

Which dataset do you want to use?

Ratio of training to test data: 70%

Noise: 0

Batch size: 10

REGENERATE

FEATURES

Which properties do you want to feed in?

X_1
X_2
X_1^2
X_2^2
X_1X_2
$\sin(X_1)$
$\sin(X_2)$

+ − 0 HIDDEN LAYERS

OUTPUT

Test loss 0.000
Training loss 0.000

Colors shows data, neuron and weight values.

☑ Show test data ☑ Discretize output

Panel 2 (Epoch 001,019):

	Epoch	Learning rate	Activation	Regularization	Regularization rate	Problem type
	001,019	10	Linear	None	0	Classification

DATA

Which dataset do you want to use?

Ratio of training to test data: 70%

Noise: 0

Batch size: 10

REGENERATE

FEATURES

Which properties do you want to feed in?

X_1
X_2
X_1^2
X_2^2
X_1X_2
$\sin(X_1)$
$\sin(X_2)$

+ − 0 HIDDEN LAYERS

OUTPUT

Test loss 0.000
Training loss 0.000

Colors shows data, neuron and weight values.

☑ Show test data ☑ Discretize output

Panel 3 (Epoch 001,017):

Don't Worry, You Can't Break It. We Promise.

	Epoch	Learning rate	Activation	Regularization	Regularization rate	Problem type
	001,017	10	ReLU	None	0	Classification

DATA

Which dataset do you want to use?

Ratio of training to test data: 70%

Noise: 0

Batch size: 10

REGENERATE

FEATURES

Which properties do you want to feed in?

X_1
X_2
X_1^2
X_2^2
X_1X_2
$\sin(X_1)$
$\sin(X_2)$

+ − 0 HIDDEN LAYERS

OUTPUT

Test loss 0.347
Training loss 0.406

Colors shows data, neuron and weight values.

Panel 1:

Epoch 001,026

Learning rate 10

Activation Tanh

Regularization None

Regularization rate 0

Problem type Classification

DATA

Which dataset do you want to use?

Ratio of training to test data: 70%

Noise: 0

Batch size: 10

REGENERATE

FEATURES

Which properties do you want to feed in?

X_1

X_2

X_1^2

X_2^2

X_1X_2

$sin(X_1)$

$sin(X_2)$

0 HIDDEN LAYERS

OUTPUT

Test loss 0.494
Training loss 0.614

Colors shows data, neuron and weight values.

Show test data   Discretize output

Panel 2:

Epoch 001,025

Learning rate 10

Activation Linear

Regularization None

Regularization rate 0

Problem type Classification

DATA

Which dataset do you want to use?

Ratio of training to test data: 70%

Noise: 0

Batch size: 10

REGENERATE

FEATURES

Which properties do you want to feed in?

X_1

X_2

X_1^2

X_2^2

X_1X_2

$sin(X_1)$

$sin(X_2)$

0 HIDDEN LAYERS

OUTPUT

Test loss 0.457
Training loss 0.570

Colors shows data, neuron and weight values.

Show test data   Discretize output