Automatic generated report CNET0014.

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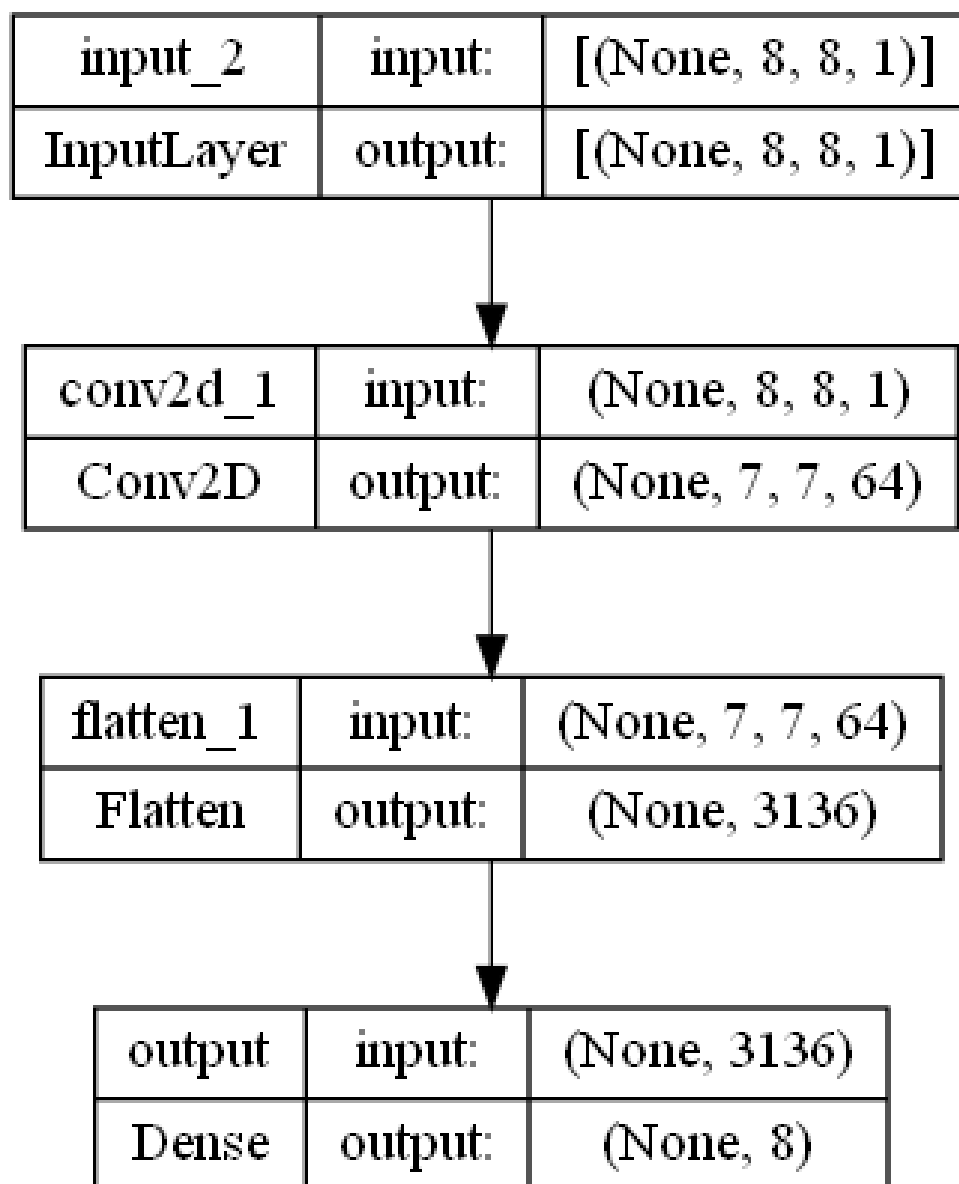
input_2	input:	[(None, 8, 8, 1)]
InputLayer	output:	[(None, 8, 8, 1)]

conv2d_1	input:	(None, 8, 8, 1)
Conv2D	output:	(None, 7, 7, 64)

flatten_1	input:	(None, 7, 7, 64)
Flatten	output:	(None, 3136)

output	input:	(None, 3136)
Dense	output:	(None, 8)

Fig. 1: Model visualization

1 Model

The model has been compiled successfully with the following parameters:

Layer	Shape	Attributes
Conv2D	(64, 2)	
Flatten	(None,)	

Tab. 1: Model architecture and attributes.

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──────────────────────────┤  Model summary  ├──────────────────────────
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Model: "model"

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 Layer type                Output Shape              Param #
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 input_2 InputLayer        [None, 8, 8, 1]           0

 conv2d_1 Conv2D           None, 7, 7, 64            320

 flatten_1 Flatten         None, 3136               0

 output Dense              None, 8                  25096


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Total params: 25,416
Trainable params: 25,416
Non-trainable params: 0

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1.1 Compiler

- *Problem specifications.* The input shape mesh is *(8, 8, 1)*, while the output shape is *(8)*.

- *Compiling options.* The model makes use of the *mean squared error* loss function and the *adam* optimizer. The metrics taken into account are accuracy and loss.

- *Devices.* The model was trained with 1GPUs.

2 Database

The database **32k 8t 0w 2c** was generated with *hypertrain*. The training - validation - test distribution is *'train': 70, 'validation': 20, 'test': 10* and the total size of the database is *(22938, 6554, 3276)*.

3 Performance

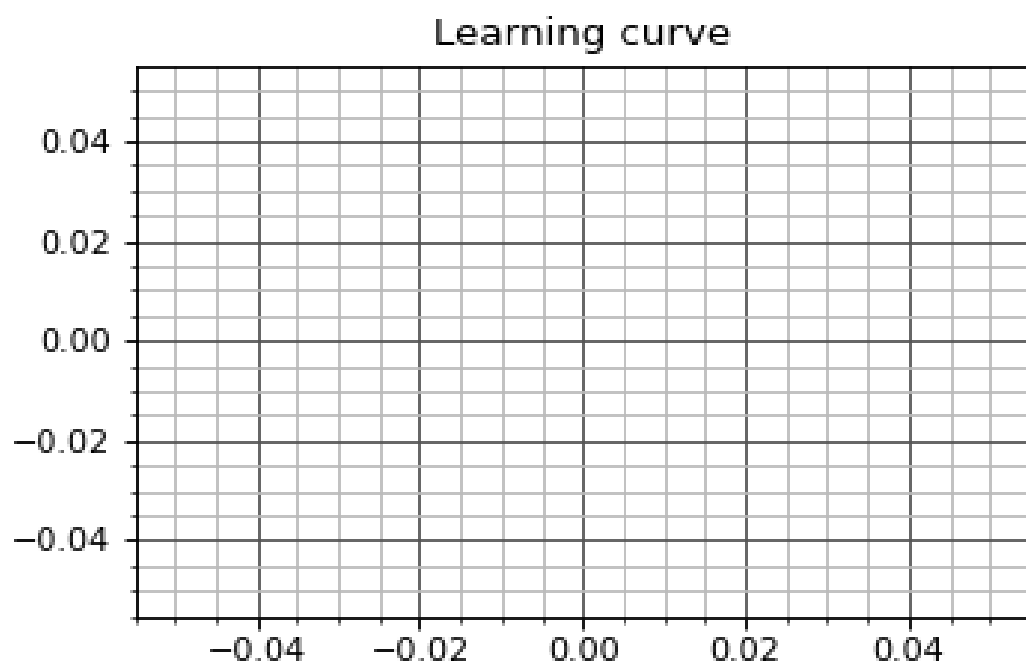The obtained learning curve is shown below. With **maxloss**: ???, and **minloss**: ???.

Fig. 2: Learning curve with the introduced database.