Automatic generated report CNET0044.

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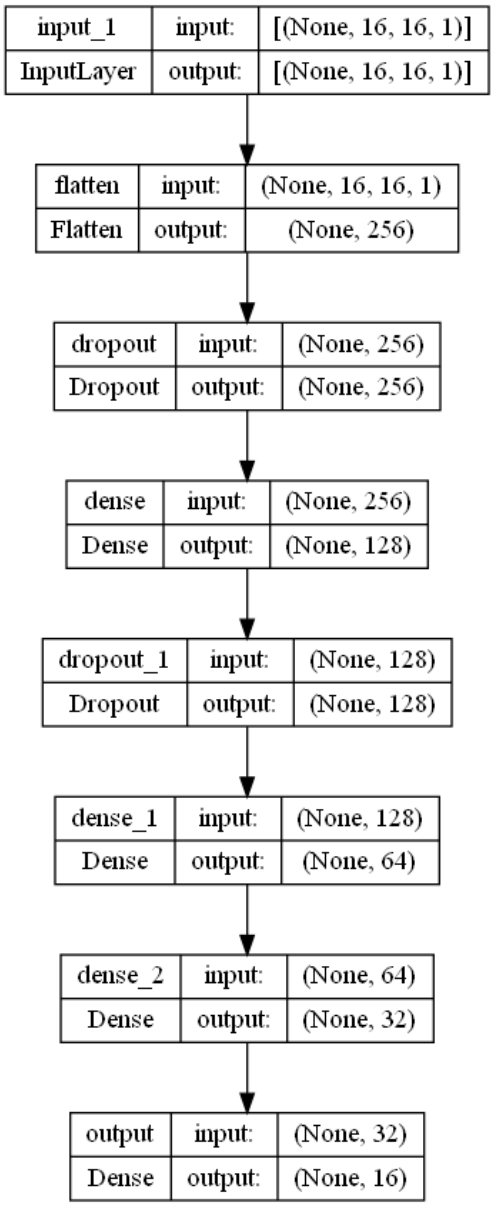

Fig. 1: Model visualization

1 Model

The model has been compiled successfully with the following parameters:

Layer	Shape	Attributes
Flatten	(None,)	
Dropout	(0.7,)	
Dense	(128,)	
Dropout	(0.7,)	
Dense	(64,)	
Dense	(32,)	

Tab. 1: Model architecture and attributes.

Model summary

```
Model: "model_0"
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 Layer type                 Output Shape              Param #
=================================================================
 input_1 InputLayer         [None, 16, 16, 1]         0

 flatten Flatten            None, 256                 0

 dropout Dropout            None, 256                 0

 dense Dense                None, 128                 32896

 dropout_1 Dropout          None, 128                 0

 dense_1 Dense              None, 64                  8256

 dense_2 Dense              None, 32                  2080

 output Dense               None, 16                  528

=================================================================
Total params: 43,760
Trainable params: 43,760
Non-trainable params: 0
_________________________________________________________________
```

1.1 Compiler

- *Problem specifications.* The input shape mesh is *(16, 16, 1)*, while the output shape is (*16*).
- *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 **test wk** was generated with *BaseNetDatabase (BND)* . The training - validation - test distribution is *(60, 20, 20)* and the total size of the database is *256*.

3 Performance

The obtained learning curve is shown below. With **maxloss**: 0.1608, and **minloss**: 0.0839.

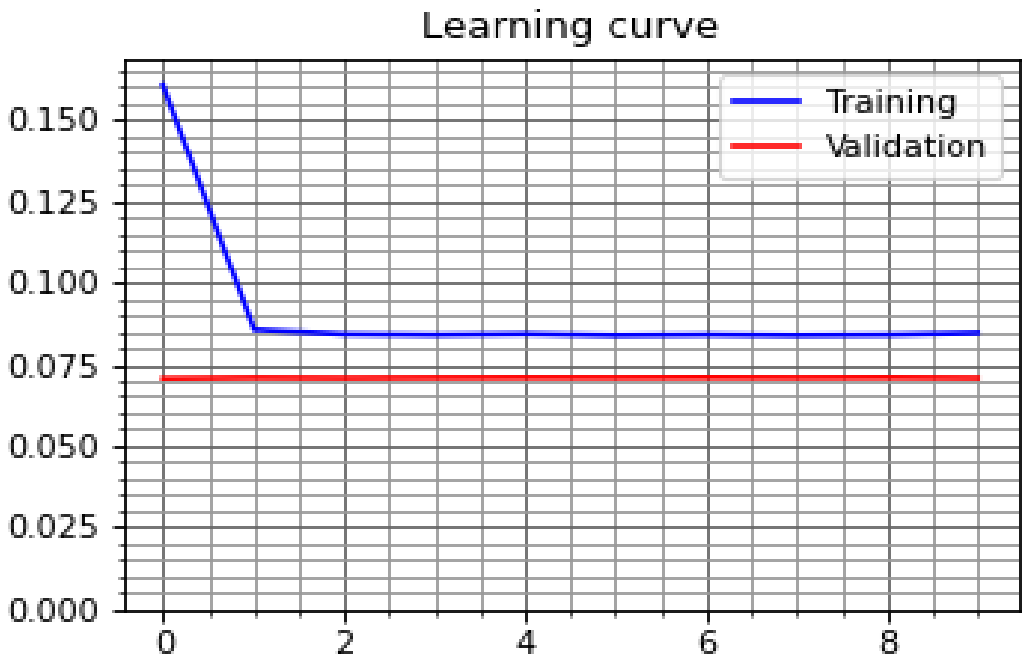

Fig. 2: Learning curve with the introduced database.