Automatic generated report CNET0012.

Author: Palomo Alonso, Alberto

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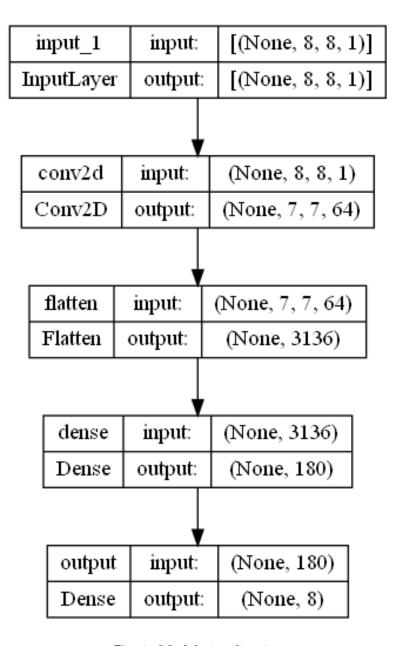


Fig. 1: Model visualization

1 Model

Model: "model"

The model has been compiled successfully with the following parameters:

| Layer | Shape | Attributes |
|---------|---------|------------|
| Conv2D | (64, 2) | |
| Flatten | (None,) | |
| Dense | (180,) | |

Tab. 1: Model architecture and attributes.

| | Model | summary |
|--|-----------------|---------|
| Model: "model" | | |
| Layer type | Output Shape | Param # |
| input_1 InputLayer | [None, 8, 8, 1] | |
| conv2d Conv2D | None, 7, 7, 64 | 320 |
| flatten Flatten | None, 3136 | 0 |
| dense Dense | None, 180 | 564660 |
| output Dense | None, 8 | 1448 |
| Model: "model" | Output Shape | |
| input_1 InputLayer | [None, 8, 8, 1] | |
| conv2d Conv2D | None, 7, 7, 64 | 320 |
| flatten Flatten | None, 3136 | 0 |
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| ====================================== | 3 | |

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| | | |

Total params: 566,428 Trainable params: 566,428 Non-trainable params: 0

1.1 Compiler

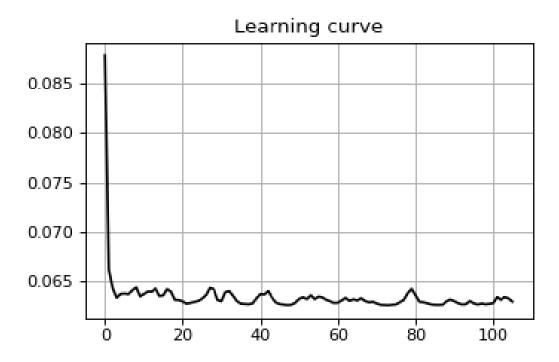
- Problem specifications. The input shape mesh is (8, 8, 1), while the output shape is (8).
- Compiling options. The model makes use of the mean squared error loss function and the adam optimizer. The metrics taken into account are accuracy and loss.
- Devices. The model was trained with 1GPUs.

2 Database

The database **test dusan** was generated with *hypertrain*. The training - validation - test distribution is 'train': 50, 'validation': 25, 'test': 25 and the total size of the database is (1024, 512, 512).

3 Performance

The obtained learning curve is shown below. With maxloss: 0.0878, and minloss: 0.0626.



 $\mathsf{Fig.}\ 2:\ \mathsf{Learning}\ \mathsf{curve}\ \mathsf{with}\ \mathsf{the}\ \mathsf{introduced}\ \mathsf{database}.$