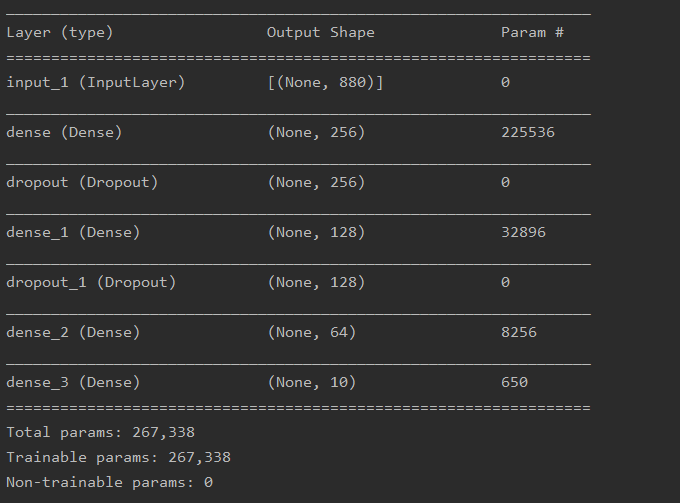
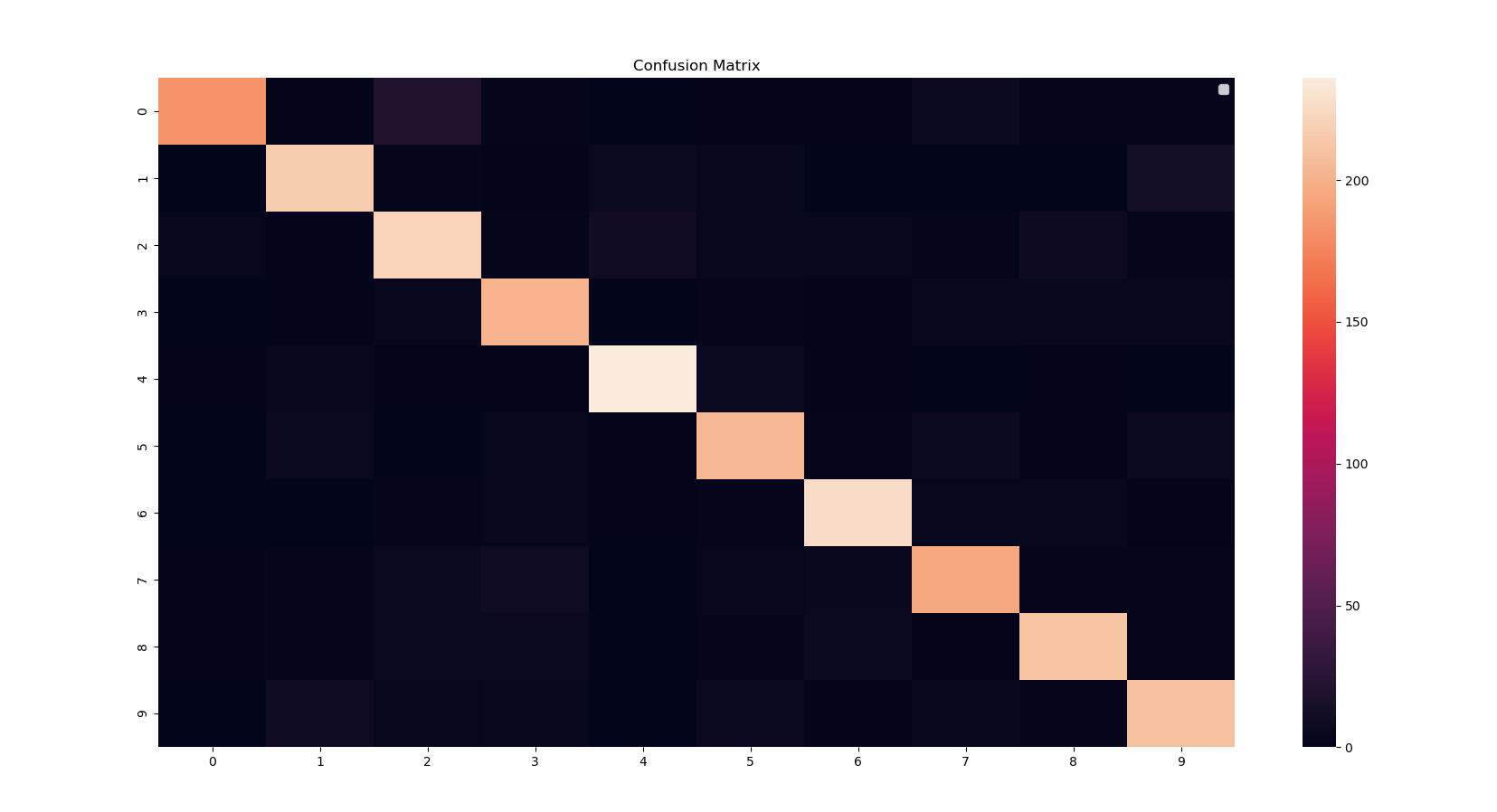


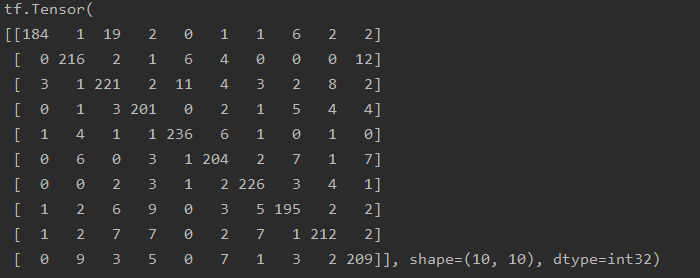
* The model: model\_droput0.5.h5

Batch = 64



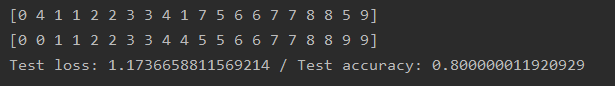
Confusion matrix







Testing with my own voice:



The first row is the prediction, the second one is the ground truth. For each digit there are two types of recording. The first one, corresponding to the first digit, I recorded only one digit at a time; the second digit comes from one recording where I uttered all digits from 0 to 9, then using a script split them.

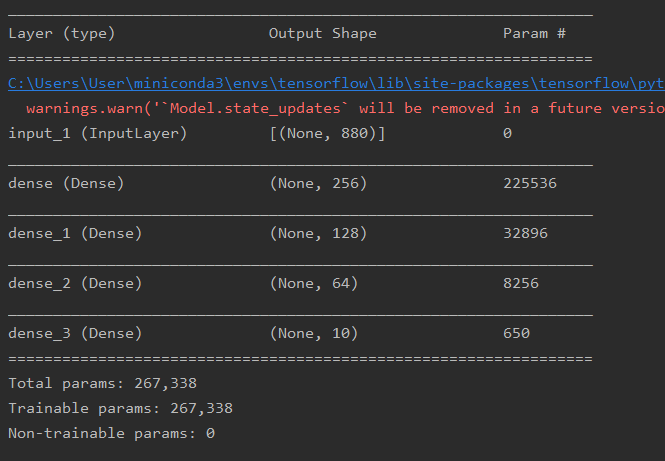
Upper-bound Lipschitz constant:



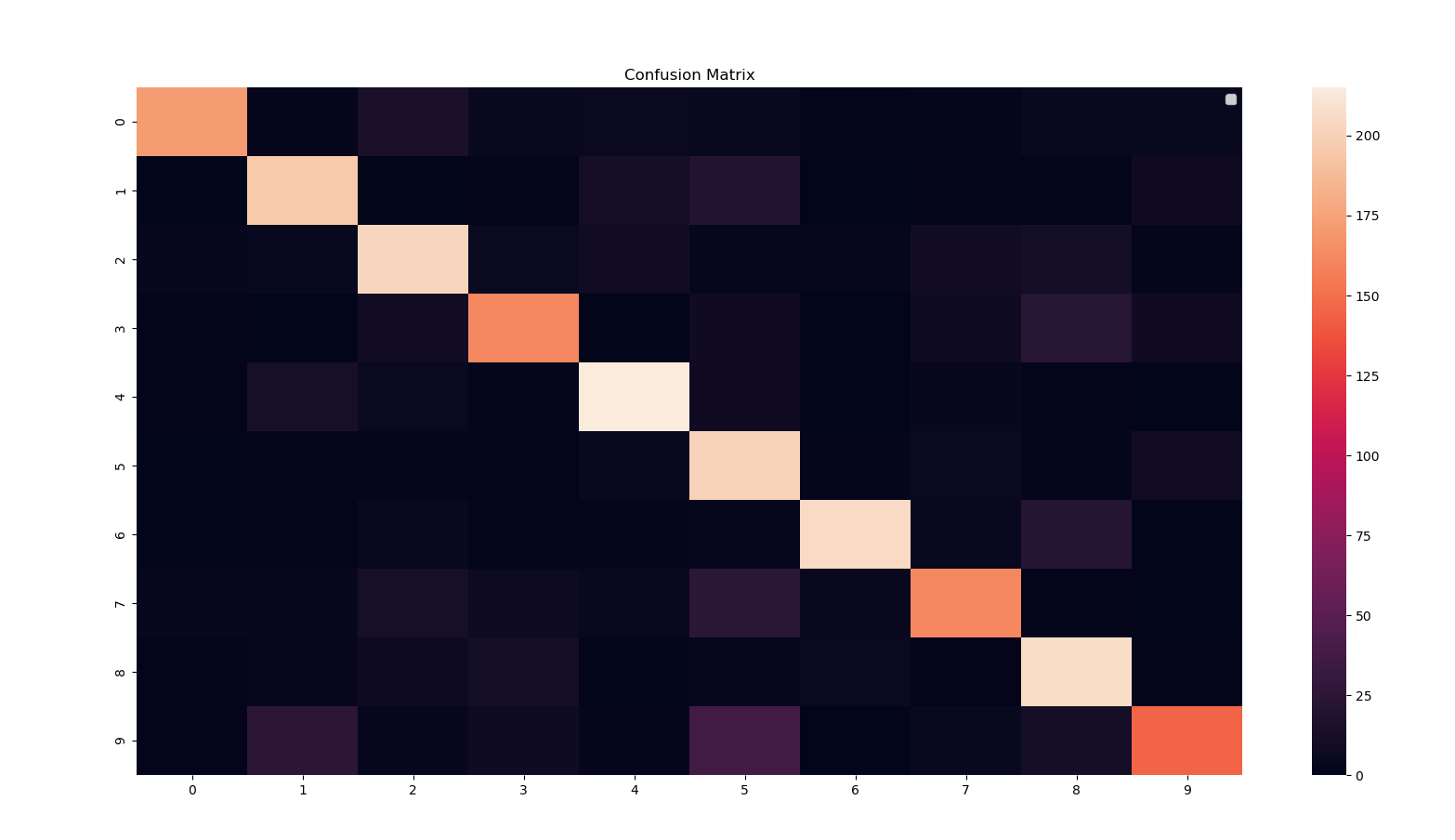
20.09.2021

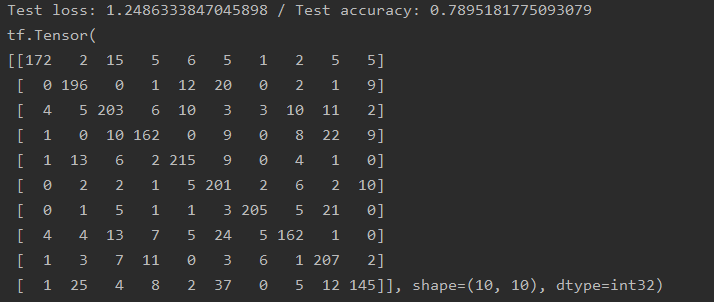
* **Training a constrained model: model\_NoDropout.h5**

**Batch = 64**

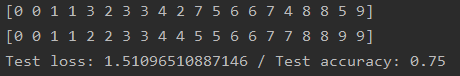
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For recordings of my voice:

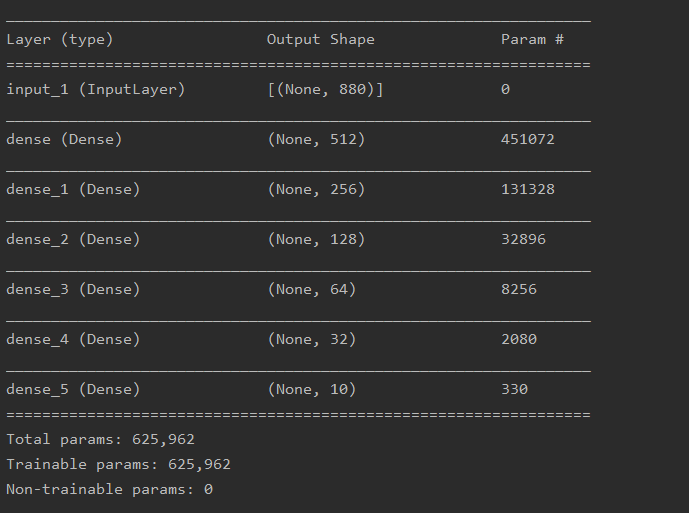


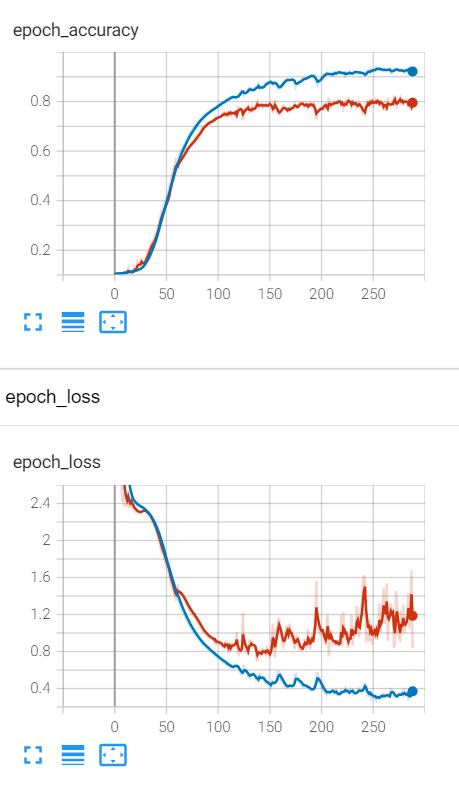
Lipchitz constant:

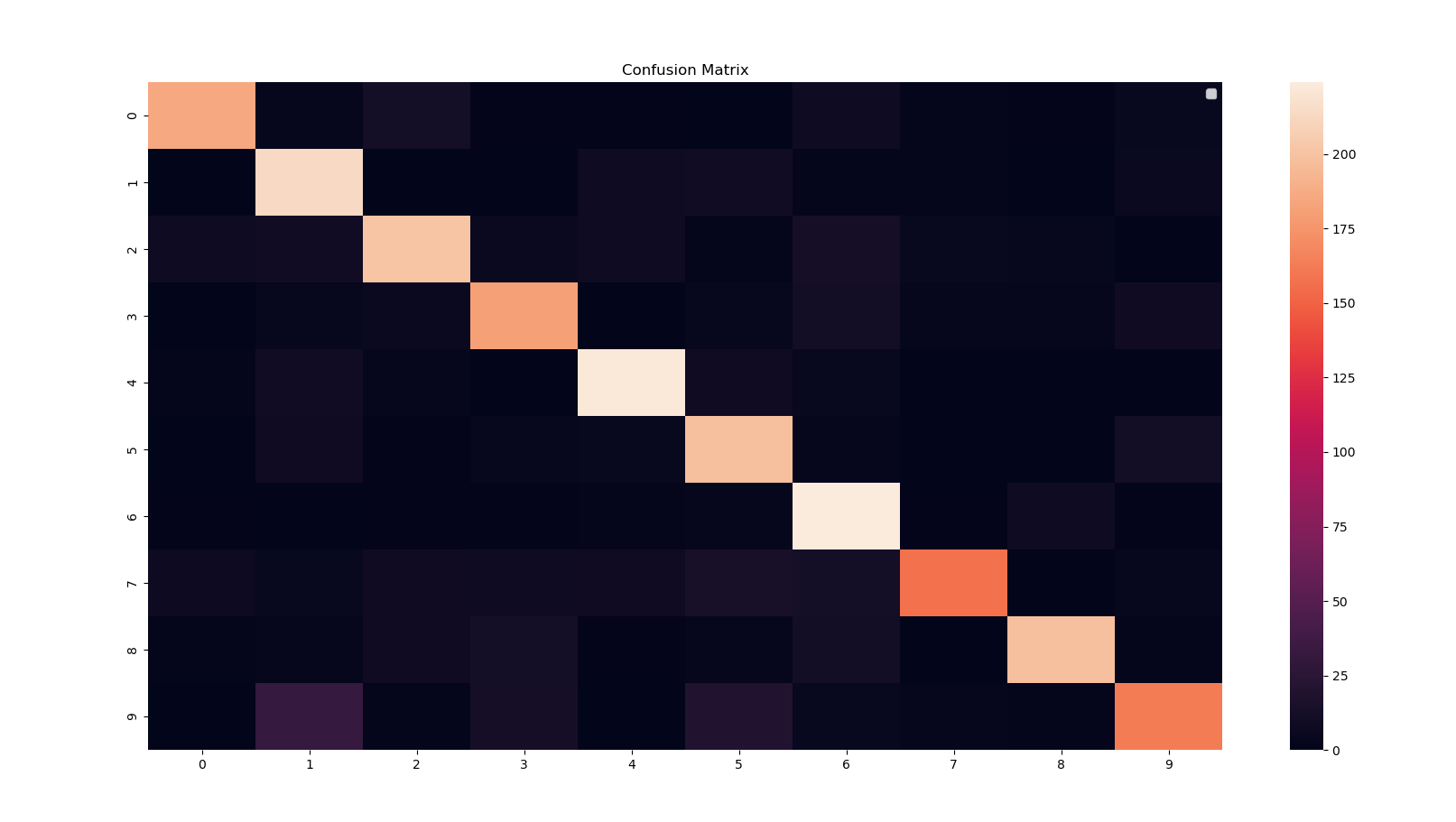


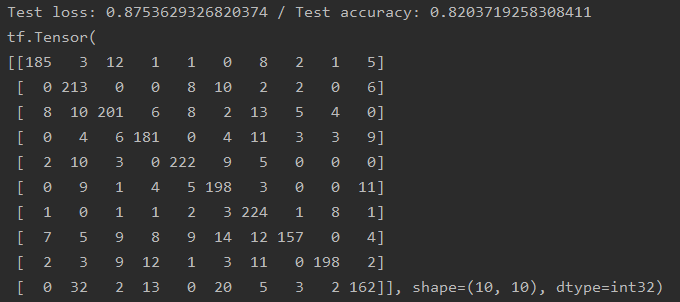
* **Training a constrained more complex model: model\_NoDropout\_moreLayers.h5**

**Batch = 256**

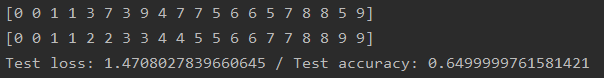








For recordings of my voice:



Lipchitz constant:



* **Training a constrained more complex model: model\_Dropout02\_moreLayers.h5**

**Batch = 64**

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Layer (type) Output Shape Param #

=================================================================

input\_1 (InputLayer) [(None, 880)] 0

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dense (Dense) (None, 512) 451072

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dropout (Dropout) (None, 512) 0

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dense\_1 (Dense) (None, 256) 131328

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dense\_2 (Dense) (None, 128) 32896

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dense\_3 (Dense) (None, 64) 8256

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dense\_4 (Dense) (None, 32) 2080

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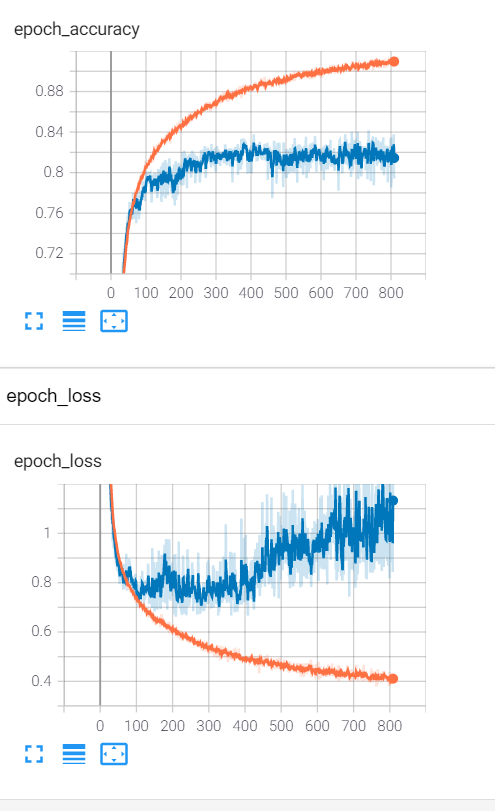
dense\_5 (Dense) (None, 10) 330

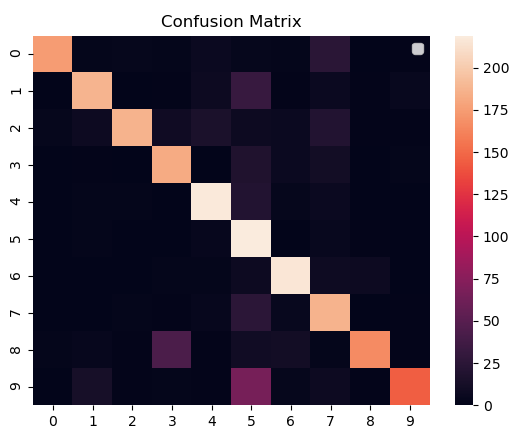
=================================================================

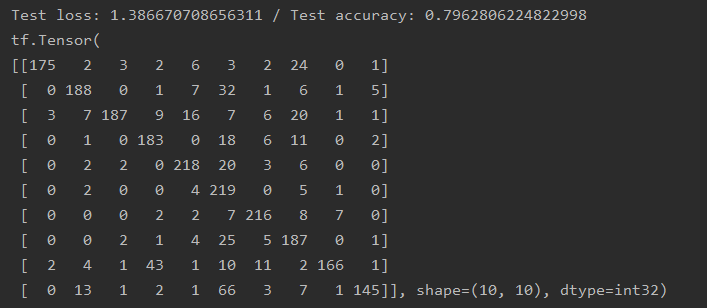
Total params: 625,962

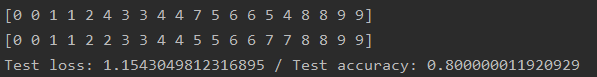
Trainable params: 625,962

Non-trainable params: 0





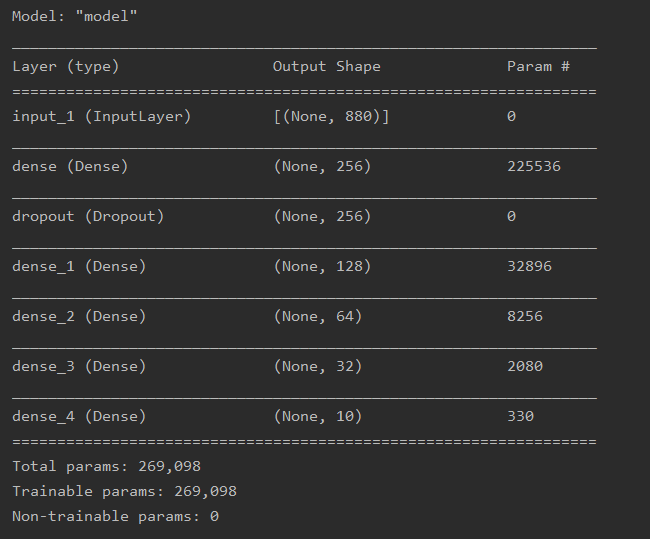


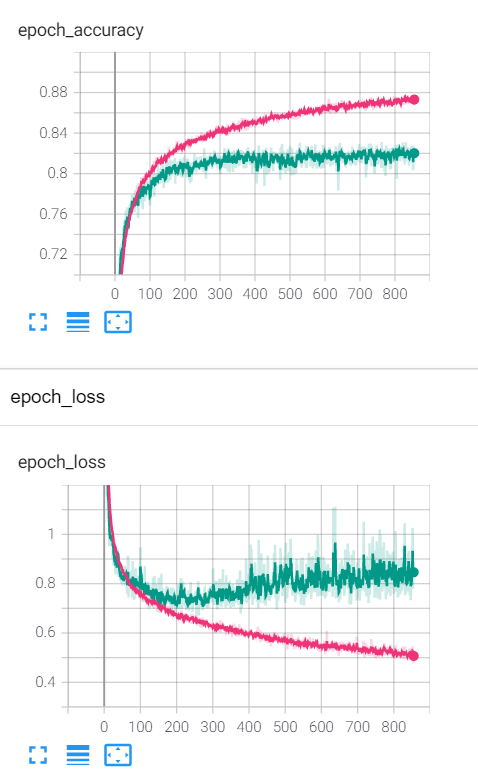


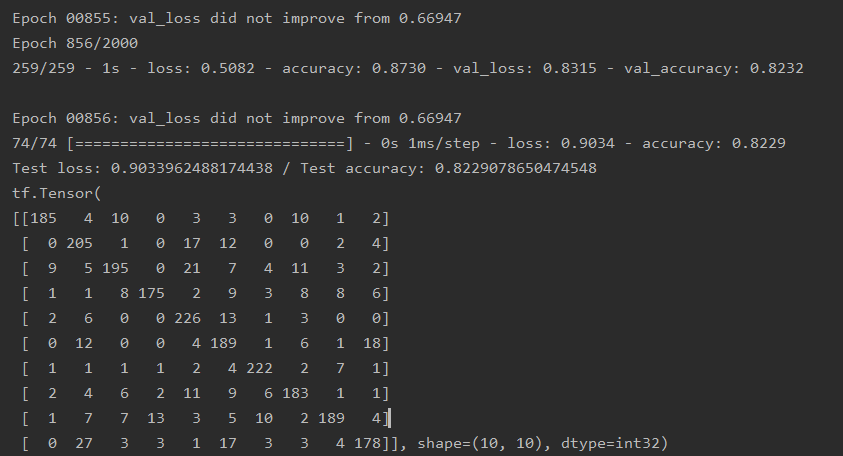


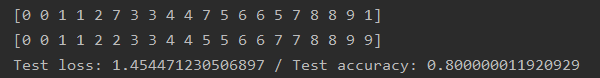
* **Training a constrained more complex model: model\_Dropout02\_moreLayersV2.h5**

**Batch = 64**

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