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MSE                                                                 TSM Deep Learning

# Practical Work 07 – 08/04/2021
# Deep Learning Frameworks

**Objectives**

The main objective of this PW is to explore the impact of regularisation, parameter initialisation, batch normalisation and different optimisers on the training and/or the test performance. On the fly, you will learn further capabilities of Tensorflow including how to use tensorboard.

**Submission**

— **Deadline** : Wednesdays 21st April, 10am

— **Format** : ipynb

## Exercise : Parameter Initialisation, BatchNorm, Optimisers

In this exercise, you will create a Keras model and play with different settings. The basis here is the Jupyter notebook `mlp_keras_stud.ipynb`.

Inspect the code in the notebook and complete it.

Learn how to use the tensorboard and compare results.

Proceed as follows :

a) Implement the baseline.
b) Play with different weights initializers and activation functions.
c) Explore the effect of Batch Normalisation.
d) Explore the effect of different Optimizers.