**Artificial Neural Networks**

*Exercise Session 5 – Final Project -Non-linear regression and classification with MLP’s,*

*report by,*

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***Data set information:***

***Sampling of the data set for Training, Validation and Testing:***

***Motivation for Cross validation:***

***Consideration of the different models:***

***Number of hidden layers***

***Number of neurons on each hidden layer***

***Selection of Learning algorithm:***

***Selection of Transfer function:***

***Final Algorithm and the transfer function:***

***Performance assessment***

***Plot the surface for a given test set:***

***Error curves***

***Mean Squared Error on the test set***

***Comparison of the performance between the training and test set***

***How we can improve the performance of the model***