

Lab 3: Classification of Iris Flowers.

During this lab you will gain practical knowledge of the classification methods as well as their selection and validation. This has been presented to use during lectures 12-17. To refresh the material, please consult the notes available for the module on Moodle.

In this lab, you will need to use **SciKitLearn** module of Python to import contents of iris dataset. Assume that the dataset provided by **SciKitlearn** is clean and free of errors. Use the techniques presented to you in class to split the dataset into multiple subsets (i.e. train, test, validation). Build at least three different classifiers for the problem. Choose the best model amongst those, report on its expected future performance.

Classification of Iris Flowers (10 points)

- Step 1.** Import the Iris Dataset from SciKitLearn. **(1 point)**
- Step 2.** Split information from the dataset into Train, Test, Validation subset **(1 point)**
- Step 3.** Ensure the subsets are Independent and Representative of the original dataset. **(1 point)**
- Step 4.** Build the first classifier for the problem. **(1 point)**
- Step 5.** Build the second classifier for the problem. **(1 point)**
- Step 6.** Build the third and final classifier. **(1 point)**
- Step 7.** Select the best out of the three classifiers. **(2 points)**
- Step 8.** Report on the future performance of the selected classifier. **(2 points)**