Exam

Deep Learning Introduction

Build and **train** a neural network on the *rice_dataset_simplified.csv* dataset provided using the Tensorflow-Keras framework.

The *rice_dataset_simplified.csv* dataset is a collection of rice images of size (50x50). There are five different types of rice: Arborio, Basmati, Ipsala, Jasmine and Karacadag.

The task is to correctly detect the type of each grain of rice.

You should:

- **(2 pt) Correctly use a test & validation set.**
- **(4 pt) Preprocess the data**: *While preprocessing is not the subject of this exam, wrong/poor preprocessing steps will be sanctioned.*
- **(12 pt) Build, train & compare a regular neural network (MLP) and a convolutional neural network (CNN)**: *You should use as many techniques learnt during the class as possible.*
- **(2 pt) Explain your choices & add comments on your code.**

(Bonus point) Save your model.