## Image Analysis and Processing 2<sup>nd</sup> Assignment 07 June 2024

Use the dataset in https://www.kaggle.com/paultimothymooney/chest-xray-pneumonia and develop an intelligent system do detect pneumonia in chest X-ray images. Consider the following steps:

- 1. Explore the data and define appropriate classes
- 2. Visualize data and employ appropriate preprocessing to X-ray images
- 3. Develop the detection algorithms
  - 1. Using features and classical machine learning techniques
  - 2. Using a neural network architecture (you may investigate various

architectures or use an existing one)

4. Present the results of your algorithms (confusion matrix, accuracy, etc.)