

## Continuous Assessment 1

Please email me your work (**pdf file**, containing results and explanations of how you do it) by 7 Oct 2021. Email: [ekzmao@ntu.edu.sg](mailto:ekzmao@ntu.edu.sg)

### Question:

Given a two-class pattern classification problem, train two neural network classifiers using the training data, and then predict class labels of the testing data.

The training data consists of 330 samples. The data is in the file `data_train`, and the label is in the file `label_train`. The testing data is in `data_test` (21 samples).

- (1) Train an RBF neural network classifier, assuming Gaussian basis function is used.  
The suitable number of hidden layer neurons can be found by trial and error.
- (2) Train a kernel SVM classifier, assuming Gaussian kernel function is used.
- (3) Compare and discuss the performance of the two classifiers on the training data.
- (4) Predict class labels for testing data using the two classifiers