

## **SCHOOL OF COMPUTER TECHNOLOGY**

## AASD 4001 Mathematical Concepts for Machine Learning

## **Term Project:**

- 1. Provide a description of the dataset used including explanation of various features.
- 2. Pre-process and clean the dataset as appropriate.
- 3. Use following approaches for classification of the dataset:
  - A. Logistic Regression
  - B. Decision Tree
  - C. Random Forest
  - D. SGD
  - E. SVM
- 4. Use GridSearchCV to tune the parameter of each of the above models. Can you obtain better results in this step for any of the models? Discuss your observations.
- 5. Randomly (or based on certain hypothesis) remove some features and re-evaluate the models. Document your observations with respect to models performances.