COS 710: Artificial Intelligence
Assignment 2: Data Classification
Due Date: 6 May 2022

This assignment involves employing genetic programming to produce a classifier for heart disease diagnosis. The classifier must output the type of heart disease, namely, 0 to 4, where 0 indicates no heart disease. The classifier can be a decision tree, arithmetic tree, logical tree or production rule system. The problem description and benchmark set to apply the classifier to can accessed from https://archive.ics.uci.edu/ml/datasets/Heart+Disease.

Assignments must be submitted via clickUP. The source code, compiled code and report must be submitted. The report must include:

- A brief description of the data set used

- A description of the GP algorithm in terms of the following:

    - The representation used to represent a classifier

    - Define the fitness function used

    - The selection method used

    - Describe the genetic operators used

    - Termination criterion used

- Tables presenting the best, average and standard deviation of the accuracy for training and accuracy for testing

Total: 25