

COS 710: Artificial Intelligence
Assignment 3: Grammatical Evolution
Due Date: 30 May 2022

This assignment involves applying grammatical evolution to the problem in either Assignment 1 or Assignment 2 and comparing the performance of grammatical evolution to genetic programming in solving this problem.

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

- A description of the grammatical evolution algorithm in terms of the following:
  - The representation used including the grammar
  - 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 value for testing.
- A comparison of the performance with the genetic programming algorithm from Assignment 1 or Assignment 2.

Total: 25