



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

COS 710: Artificial Intelligence
Assignment 1: Prediction
Due Date: 28 March 2022

This assignment involves employing genetic programming to predict the stage of load shedding for a particular day in South Africa. Use the dataset available at https://www.kaggle.com/wangca01/datathon?select=south_africa_load_shedding_history.csv for training and testing.

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
 - Define the fitness function used
 - The selection method used
 - Describe the genetic operators used
 - Termination criterion used
- The parameter values used and details of how these were obtained
- Tables presenting the best, average and standard deviation of the accuracy for training and accuracy for testing
- A discussion on the performance of the evolved models

Total: 25