

Machine Learning

Monsoon 2020

1 Instructions

- Read the instructions and assignments carefully.
- The name of your assignment file must be, your name + "_" + assignment code. The the assignment code (e.g., AssignML04) is given in the beginning of the assignment.
- Submit the assignment on time. Otherwise, it could lead to a heavy penalty.

2 Assignment

AssignML04(10 points):

Consider the climate change dataset *climate_change.csv* into R. Divide the data into a training set, consisting of all the observations up to and including 2006, and a testing set consisting of the remaining years. A training set refers to the data that will be used to build the model, and a testing set refers to the data we will use to test our predictive ability.

Build a linear regression model to predict the dependent variable Temp, using MEI, CO2, CH4, N2O, CFC.11, CFC.12, TSI, and Aerosols as independent variables (Year and Month should NOT be used in the model). Use the training set to build the model. For testing, your program should take a new input to predict the temperature. Submit the outputs for 5 different inputs.

The **deadline** for the submission of AssignML04 is **23-10-2020**.