Practical Assessment 1 for BC3409

AI has been used in many areas such as automation, prediction, etc. In this practical assessment 1, you would need to use AI to predict Dow Index (1985 to 2019).

Data for Dow is attached. You could select any range of dates to predict, minimum one year. You could use any other attributes including any equity index, currency, economic factor, commodity that could explain Dow.

Project Deliverables:

1. A concise report in word document format, with a one page executive summary, of your most important findings. Guideline: Approximately 5 pages, excluding appendices and executive summary.

2. The R/Python script used to execute the analytics. Also provide the screenshots of the software and settings used. Show enough such that another independent group of researchers can reproduce and verify your findings.

3. Deadline: 25 March 9am.

Project Grading Criteria:

Component	Criteria	Weightage
Problem Analysis	How well you understood about prediction of Dow.	20%
AI Solution	How well you conduct the AI to predict Dow.	60%
Written Communication	How well you write the report.	20%

AI References:

https://en.wikipedia.org/wiki/Applications_of_artificial_intelligence

https://dzone.com/articles/top-10-most-popular-ai-models

https://www.dropbox.com/sh/47hp5s6b3fopyc5/AACYKQ8BHzqu6l_s_KjUujKja?dl=0

Example Datasets:

You can use any or none of these, or/and any other suitable data that your team found.

Forex:

http://ratedata.gaincapital.com/

https://www.dukascopy.com/swiss/english/marketwatch/historical/

https://www.oanda.com/fx-for-business/historical-rates

Equity

http://unicorn.us.com/advdec/

http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html

http://pages.swcp.com/stocks/

https://www.iasg.com/en-us/managed-futures/market-quotes

https://finance.yahoo.com/

Fix Income

https://live.barcap.com/UAB/ct_logon_basic?CT_ORIG_URL=%2FBC%2Fdispatcher&ct_orig_uri=%2FBC%2Fdispatcher

https://www.federalreserve.gov/releases/h15/data.htm

http://www.bbalibor.com/rates/

Options

http://www.ivolatility.com/

https://optionmetrics.com/

http://www.livevol.com/

https://www.historicaloptiondata.com/

Future

https://www.icowins.com/

https://www.cmegroup.com/market-data.html?redirect=/market-data/index.html

http://www.simiansavants.com/cmedata.shtml

Commodity

https://www.liffe-commodities.com/