I am intentional about my choice of this course in order to develop competence in tools and techniques in the science of data and its application, in readiness for a better career prospect, as AI is just evolving in my Country Nigeria.

2

The journey actually started when I obtained an HND in Mathematics and Statistics with interest in Econometrics, aiming at investigating and determining the impact of the perceived regressor or predictor variables on the dependent variable.

I believe the entrenched courses in its Machine Learning module will put me in the right pedestal.

3

To begin with, I am an experienced IT Business Analyst in Data Modelling and Database Design for operational and analytical systems. I have a track record of successful implementation and management of HRIS data strategy across major economic sectors at SystemSpecs Group in Nigeria. I have over 12 years work experience in the IT sector.

In a bid to bathing a brand in the industry, I developed a web-based aptitude testing application named “meritCbt” (https://t9y.me/0TvR) using PHP, JavaScript and AngularJS stack

In addition, my background in Mathematics and Statistics gave me the leverage for numerical, analytical and algorithmic skills.

Furthermore, my quest for AI resulted in rigorous self-learning to earn a good knowledge of Python programming for Data Science. To this end, I have successfully written codes in Python (ver. 3.11) for data cleansing, correlation and visualisation. (Please codes excepts below).

#File Name: Cleansing.py

import pandas as pd

import matplotlib.pyplot as plt

df=pd.read\_csv("rawdata.csv") #Loading of rawdata from csv into DataFrame df

df.loc[7,"Duration"]=45 #Replacing oulier (450) in "Duration" field and index 7 with 45

df.drop\_duplicates(inplace = True) #Removal of duplicate and updting the DataFrame

#Reducing any value greter that 60 to 55 in "Duration" filed

for x in df.index:

if df.loc[x,"Duration"] >60:

df.loc[x,"Duration"] =55

df["Date"]=pd.to\_datetime(df["Date"]) #Correcting wrong date format

x=df["Calories"].mean() #Computing the mean of "Calories" values

df["Calories"].fillna(x, inplace = True) #Replacing missing values with the mean "Calories" value

df.dropna(subset=["Date"], inplace=True) #Removing the row that contains unknown date value

print(df.to\_string()) #Printing the cleaned dataset

#File Name: Correlation.py

import pandas as pd

df=pd.read\_csv("rawdata.csv")

df.loc[7,"Duration"]=45

df.drop\_duplicates(inplace = True)

for x in df.index:

if df.loc[x,"Duration"] >60:

df.loc[x,"Duration"] =55

df["Date"]=pd.to\_datetime(df["Date"])

x=df["Calories"].mean()

df["Calories"].fillna(x, inplace = True)

df.dropna(subset=["Date"], inplace=True)

print(df[["Duration","Pulse","Maxpulse","Calories"]].corr()) #measuring correlation for all the variables

#File Name: Visualisation.py

#Visualisation

import pandas as pd

import matplotlib.pyplot as plt

#Dataframe

df=pd.read\_csv("rawdata.csv")

#Data Cleansing

df.loc[7,"Duration"]=45

df.drop\_duplicates(inplace = True)

for x in df.index:

if df.loc[x,"Duration"] >60:

df.loc[x,"Duration"] =55

df["Date"]=pd.to\_datetime(df["Date"])

x=df["Calories"].mean()

df["Calories"].fillna(x, inplace = True)

df.dropna(subset=["Date"], inplace=True)

#Visualisation of movement of maximum pulse

df["Maxpulse"].plot(kind='line')

plt.title("Maximum Pulse Movement") #title

plt.xlabel("Index") #x axis label

plt.ylabel("Maximum Pulse") #y axis label

df.plot.bar(x="Maxpulse", y="Calories") # Bar chart of maximum pulse against calories

plt.show()

File Name: rawdata.csv

Duration Date Pulse Maxpulse Calories

60 '2020/12/01' 110 130 409.1

60 '2020/12/02' 117 145 479

60 '2020/12/03' 103 135 340

45 '2020/12/04' 109 175 282.4

45 '2020/12/05' 117 148 406

60 '2020/12/06' 102 127 300

60 '2020/12/07' 110 136 374

450 '2020/12/08' 104 134 253.3

30 '2020/12/09' 109 133 195.1

60 '2020/12/10' 98 124 269

60 '2020/12/11' 103 147 329.3

60 '2020/12/12' 100 120 250.7

67 '2020/12/12' 100 120 250.7

60 '2020/12/13' 106 128 345.3

60 '2020/12/14' 104 132 379.3

60 '2020/12/15' 98 123 275

61 '2020/12/16' 98 120 215.2

60 '2020/12/17' 100 120 300

45 '2020/12/18' 90 112 NaN

60 '2020/12/19' 103 123 323

45 '2020/12/20' 97 125 243

60 '2020/12/21' 108 131 364.2

45 NaN 100 119 282

60 '2020/12/23' 130 101 300

45 '2020/12/24' 105 132 246

60 '2020/12/25' 102 126 334.5

60 26/12/2020 100 120 250

60 '2020/12/27' 92 118 241

60 '2020/12/28' 103 132 NaN

60 '2020/12/29' 100 132 280

60 '2020/12/30' 102 129 380.3

60 '2020/12/31' 92 115 243

In addition, I recently obtained an AWS Certified Cloud Practitioner Certificate in preparedness for a specialty skill in AWS Analytics. I have just secured a free access to IBM “SkillsBuild” Training to obtain IBM Data Analyst Professional Certificate. I have also received a certificate in MongoDB for SQL to up my skill in storing datasets in JSON.

4

Artificial Intelligence is an emerging business in my Country. It is just evolving. so, studying this course now will give me a better career prospects back home.