# Predictive player values using training weights

import os

import scipy as sp

import pandas as pd

import numpy as np

from sklearn.model\_selection import train\_test\_split

from sklearn.model\_selection import cross\_val\_score

os.chdir('c:\cs project\code')

import Data\_Analytics as DataViz

os.chdir('c:\cs project\code')

import Goalkeepers as GK

os.chdir('c:\cs project\code')

import Midfielders as MID

os.chdir('c:\cs project\code')

import Forwards as FWD

#data gathering of players and seasons

data=pd.DataFrame.append(GK.dataGK,[MID.dataMID,FWD.dataFWD])

dataseason2021=data[data['Season\_2021#']==1]

dataseason2020=data[data['Season\_2020#']==1]

dataseason2019=data[data['Season\_2019#']==1]

#applying training weights

W2021=1

W2020=0.8

W2019=0.7

#create predsOLS value which is the predictive value of player for each season

dataseason2021['weights']=w2021

dataseason2021['predsOLS']=w2021\*dataseason2021['predsOLS']

dataseason2020['weights']=w2020

dataseason2020['predsOLS']=w2020\*dataseason2020['predsOLS']

dataseason2019['weights']=w2019

dataseason2019['predsOLS']=w2019\*dataseason2019['predsOLS']

datafinal=pd.DataFrame.append(dataseason2021,[dataseason2020,dataseason2019])