Radar Polar Chart Sample

#\_\*\_coding:utf-8 \_\*\_

import seaborn as sns

import matplotlib.pyplot as plt

import matplotlib

from matplotlib import font\_manager

import pandas as pd

font\_location = “*C:\\Windows\\Fonts\\malgun.ttf"*

font\_name = font\_manager.FontProperties(fname=font\_location).get\_name()

matplotlib.rc(*'font'*, family=font\_name)

matplotlib.rcParams[*'axes.unicode\_minus'*] = False

path = *u’ C:\\Temp\\’*

drink\_df = pd.read\_csv(path+*"football.csv"*)

football\_df = pd.read\_csv(path+*'/football.csv'*,encoding=*"utf8"*)

Pskill\_list = football\_df[*'Primary Skill'*].unique()

Group\_Statics = football\_df.groupby(*'Primary Skill'*).mean()

N = len(Group\_Statics[*'Neymar'*])

x\_as = [n / float(N) \* 2 \* pi for n in range(N)]

plt.rc(*'axes'*, linewidth=0.5, edgecolor=*"#888888"*) # Set color of axes

ax = plt.subplot(111, polar=True) # Create polar plot

# Set clockwise rotation. That is:

ax.set\_theta\_offset(pi / 2)

ax.set\_theta\_direction(-1)

ax.set\_rlabel\_position(0) # Set position of y-labels

# Set color and linestyle of grid

ax.xaxis.grid(True, color=*"#888888"*, linestyle=*'solid'*, linewidth=0.5)

ax.yaxis.grid(True, color=*"#888888"*, linestyle=*'solid'*, linewidth=0.5)

plt.xticks(x\_as[:-1], []) # Set number of radial axes and remove labels

plt.yticks([20, 40, 60, 80, 100], [*"20"*, *"40"*, *"60"*, *"80"*, *"100"*]) # Set yticks

# Plot data

ax.plot(x\_as, Group\_Statics[*'Neymar'*], linewidth=1, linestyle=*'solid'*, label=*'Neymar'*)

ax.fill(x\_as, Group\_Statics[*'Neymar'*], *'b'*, alpha=0.1)

ax.plot(x\_as, Group\_Statics[*'Christiano Ronaldo'*], linewidth=1, linestyle=*'solid'*,label=*'Christiano Ronaldo'*)

ax.fill(x\_as, Group\_Statics[*'Christiano Ronaldo'*], *'r'*, alpha=0.1)

ax.plot(x\_as, Group\_Statics[*'Lionel Messi'*], linewidth=1, linestyle=*'solid'*,label=*'Lionel Messi'*)

ax.fill(x\_as, Group\_Statics[*'Lionel Messi'*], *'o'*, alpha=0.1)

# Set axes limits

plt.ylim(0, 100)

plt.legend(loc=*'upper right'*, bbox\_to\_anchor=(0.1, 0.1))

# Draw ytick labels to make sure they fit properly

for i in range(N):

angle\_rad = (i / float(N) \* 2 \* pi)\* (-1)

if angle\_rad == 0:

ha, distance\_ax = *"center"*, 10

elif 0 < angle\_rad < -pi:

ha, distance\_ax = *"right"*, 1

elif angle\_rad == pi:

ha, distance\_ax = *"center"*, 1

elif angle\_rad < -pi:

ha, distance\_ax = *"left"*, 1

ax.text(angle\_rad, 100 + distance\_ax, Pskill\_list[i], size=10, horizontalalignment=ha, verticalalignment=*"center"*)

# Show polar plot

plt.show()

Seaborn Sample

#\_\*\_coding:utf-8 \_\*\_

import seaborn as sns

import matplotlib.pyplot as plt

import matplotlib

from matplotlib import font\_manager

import pandas as pd

font\_location = “*C:\\Windows\\Fonts\\malgun.ttf"*

font\_name = font\_manager.FontProperties(fname=font\_location).get\_name()

matplotlib.rc(*'font'*, family=font\_name)

matplotlib.rcParams[*'axes.unicode\_minus'*] = False

path = *u’ C:\\Temp\\’*

drink\_df = pd.read\_csv(path+*"drinks.csv"*)

cols = [*'beer\_servings'*,*'spirit\_servings'*,*'wine\_servings'*,*'total\_litres\_of\_pure\_alcohol'*]

corr = drink\_df[cols].corr(method=*'pearson'*)

cols\_view = [*'beer'*,*'spirit'*,*'wine'*,*'total'*]

sns.set(font\_scale=1.5)

hm = sns.heatmap(corr.values, cbar=True, annot=True, square=True, fmt=*'.2f'*,annot\_kws={*'size'*:15},yticklabels=cols\_view, xticklabels=cols\_view)

plt.tight\_layout()

sns.set(style=*'whitegrid'*,context=*'notebook'*)

sns.pairplot(drink\_df[[*'beer\_servings'*,*'spirit\_servings'*,*'wine\_servings'*,*'total\_litres\_of\_pure\_alcohol'*]],height=2.5)

plt.show()