Cheatography

Matplotlib, seaborn and plotly Cheat Sheet

by Anoikis via cheatography.com/74320/cs/18763/

Seaborn - 1 feature

`_, axes = plt.subplots( nrows=1, ncols=2, figsiz e=(12, 4) )` `axis[0] = sns.xxx`	put a sns plot in a pyplot figure
`sns.distplot( df['feat']);`	histogram + density of a numeric feature's repartition
`sns.boxplot( data=df['feat']);`	simple boxplot
`sns.violinplot( data=df['feat']);`	simple violin plot
`sns.countplot( x='feat',data =df);`	repartition of a categorical feature

Seaborn - 2 features

Dimensionallity reduction - t-SNE

```
from sklear n.m anifold import TSNE
from sklearn.preprocessing
import StandardScaler

# Standa rdize data
scaler = Standa rdS caler()
tab_scaled = scaler.fi t_t ran sform(tab)

# Run t-SNE
tsne = TSNE(random_state=17)
tsne_repr = tsne.fit_transform(tab_scaled)

# Show results
plt.scatter(tsne_repr[:, 0], tsne_r epr[:, 1], c=df[
);
```

Plotly

```
from plotly.of fline import downlo ad_ plo tlyjs, in
, iplot
import plotly
import plotly.gr aph _objs as go
```

```
trace0 = go.xxx
data = [trace0, trace1, ...]
layout = {'title': title, ..}
fig = go.Fig ure (da ta= data, layout=layout)
iplot(fig, show_l ink =False)
```

```
trace = go.Sca tter(x=feat1, y=feat2, name=)
```

```
trace = go.Bar(x=feat1, y=feat2 , name=)
```

```
trace = go.Box(y=feat, name=g enre)
```

```
plotly.offline.plot(
fig,
filename='file.html',
show_link=False)
```

`sns.he atm ap( matrix)`	heatmap

`sns.jointplot(`
`x=feat1,`
`y=feat2,`
`data=df,`
`kind=['scatter', 'kde'])`
	joint plot

`sns.pa irp lot(df[feats])`	scatterplots matrix
`sns.bo xpl ot(x=feat1, y=feat2, data=df, ax=ax)`	boxplot for disjoint groups (x catego-rical)
`sns.vi oli npl ot(x=feat1, y=feat2, data=df, ax=ax)`	violin plot for disjoint groups

`sns.countplot(`
`x='feat1',`
`hue='feat2',`
`data=df);`
	repartition of a categorical feature according to another one

`sns.lmplot(`
`feat1,`
`feat2,`
`data=df,`
`hue=feat3,`
`fit_reg=False)`
	scatterplot with color according to category

`sns.factorplot(`
`x=cat1,`
`y=numeric,`
`col=cat2,`
`data=df,`
`kind="box",`
`col_wrap=4,`
`size=, aspect=);`
	analyze a quantitative variable in 2 catego-rical dimensions at once