

Refining a Plot With Matplotlib

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<http://na.pycon.org>

Anscombe's Quartet



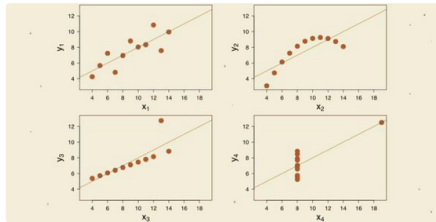
Cliff Pickover

@pickover



Follow

All have same mean, variance, correlation, & regression line. Lesson: Always Visualize Data bit.ly/1y3MMju



RETWEETS

854

LIKES

881



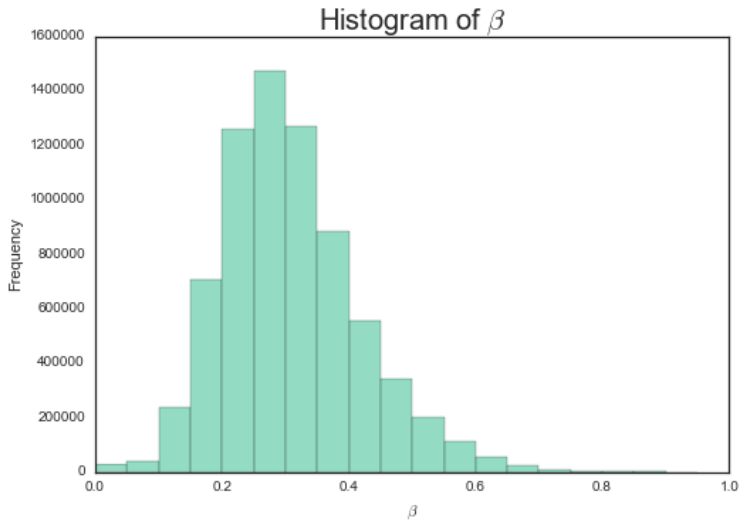
3:45 a.m. - 26 Dec 2015



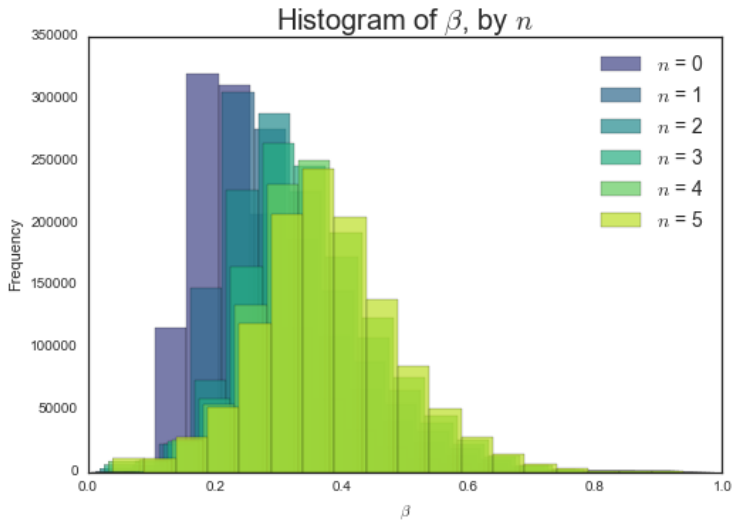
```
import matplotlib.pyplot as plt
import seaborn as sns
sns.set(style="white")

fig, ax = plt.subplots()
plt.histogram(my_data)
plt.savefig('my_plot_name.png')
plt.show()
```

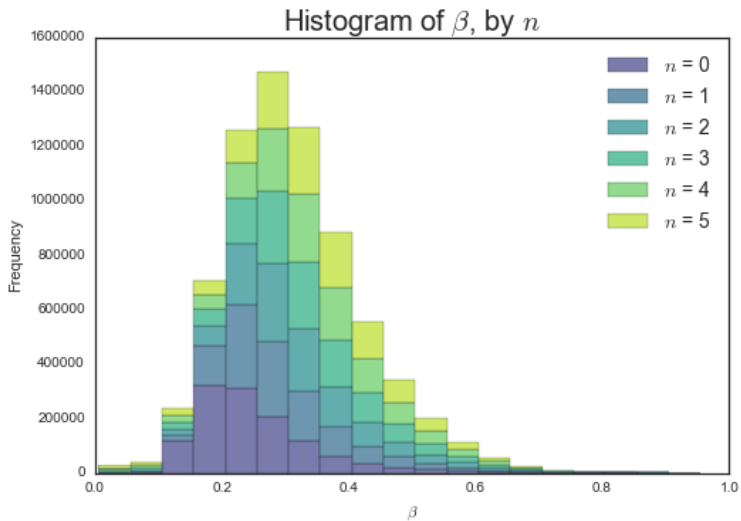
Histogram



Overlaid Histogram



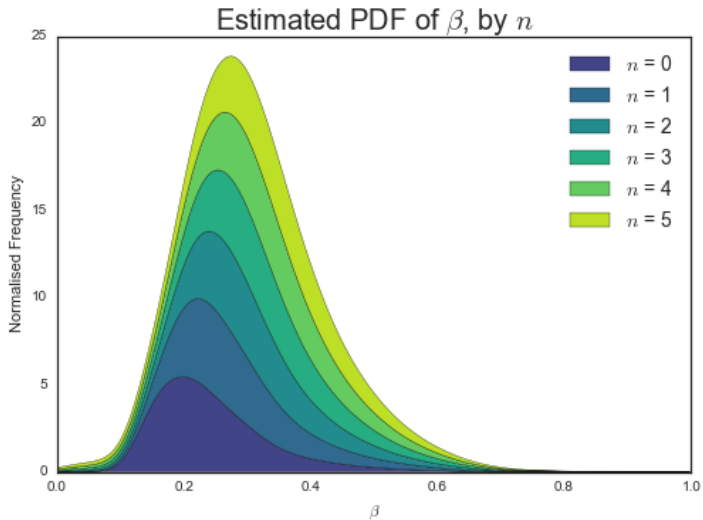
Stacked Histogram



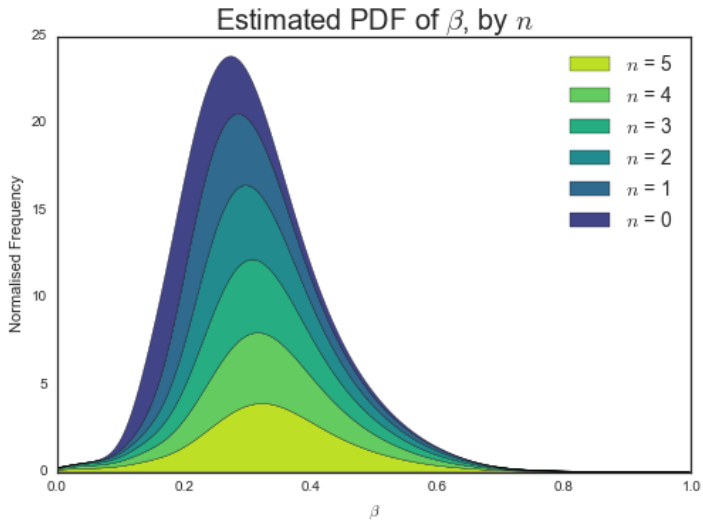
```
from scipy.stats import gaussian_kdesns.set(style="white")

densities = [gaussian_kde(row) for row in ratios_inverse_ns]
xs = [i/400.0 for i in range(400)]
ds = []
for dnsty in densities:
    dnsty.covariance_factor = lambda : 0.25
    dnsty._compute_covariance()
    ds.append(dnsty(xs))
```

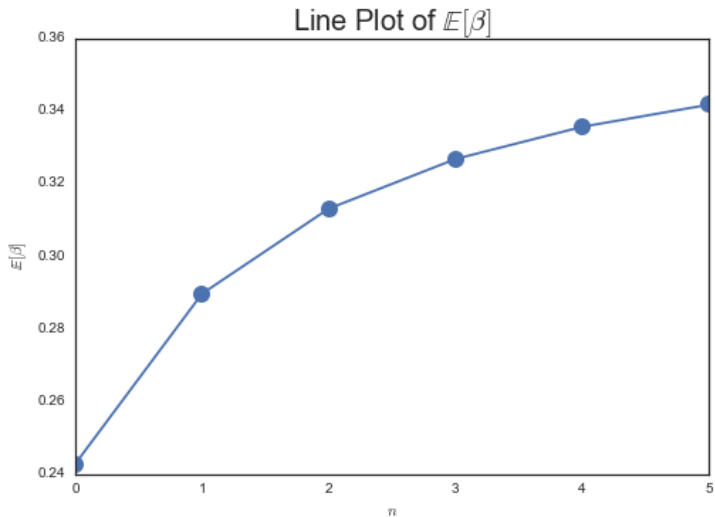
Estimated PDF



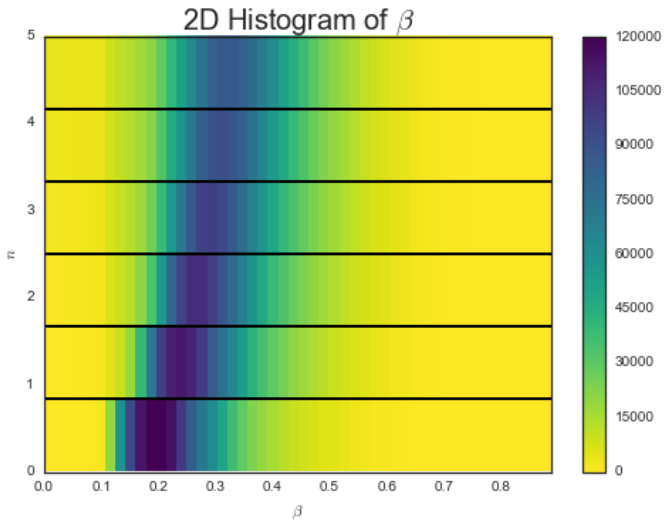
Estimated PDF



Line Plot



2D Histogram



Violinplots & Boxplots

