Distribución exponencial

Curso de Estadística Descriptiva

7/2/2019

En Python

```
from scipy.stats import expon
import numpy as np
import matplotlib.pyplot as plt
fig, ax = plt.subplots(1,1)
lam = 3
rv = expon(scale = 1/lam)
mean, var, skew, kurt = rv.stats(moments = 'mvsk')
print("Media %f"%mean)
```

```
## Media 0.333333
```

```
print("Varianza %f"%var)
```

```
## Varianza 0.111111
```

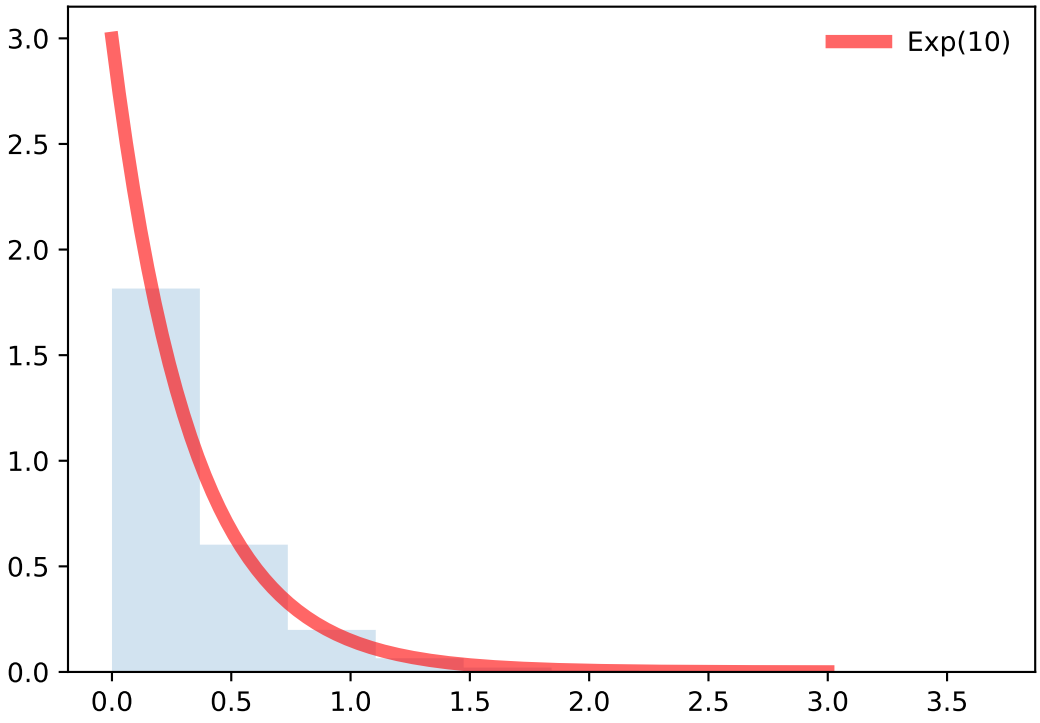
```
print("Sesgo %f"%skew)
```

```
## Sesgo 2.000000
```

```
print("Curtosis %f"%kurt)
```

```
## Curtosis 6.000000
```

```
x = np.linspace(0, 3, 1000)
ax.plot(x, rv.pdf(x), 'r-', lw = 5, alpha = 0.6, label = "Exp(10)")
r = rv.rvs(size = 100000)
ax.hist(r, density = True, histtype = 'stepfilled', alpha = 0.2)
ax.legend(loc = "best", frameon= False)
plt.show()
```


Exp(10)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5