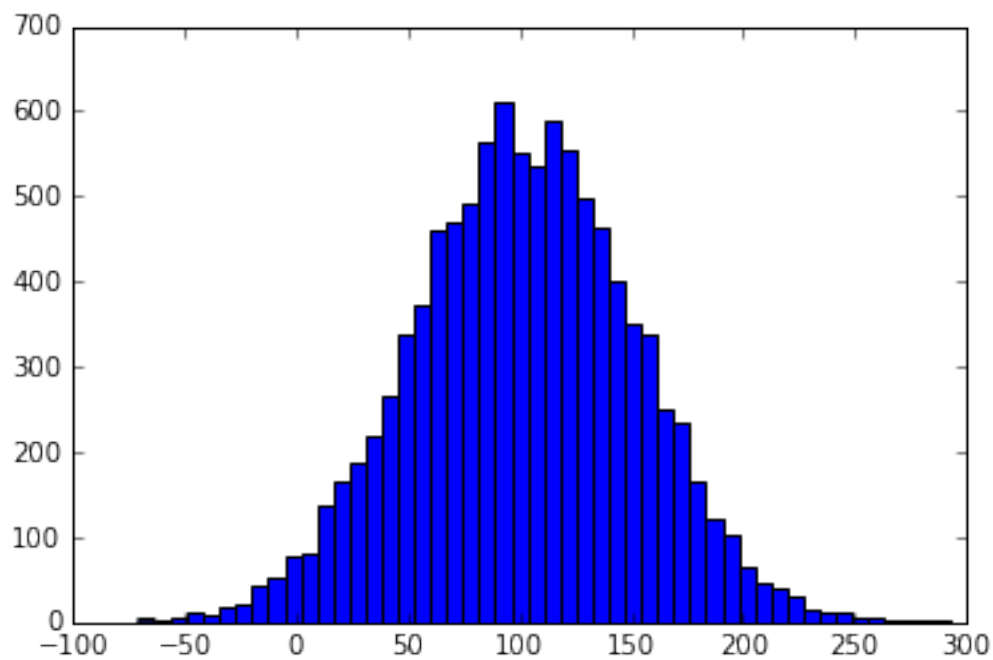# StdDevVariance

December 20, 2016

1 Standard Deviation and Variance

```
In [1]: %matplotlib inline
        import numpy as np
        import matplotlib.pyplot as plt

        incomes = np.random.normal(100.0, 50.0, 10000)

        plt.hist(incomes, 50)
        plt.show()
```



```
In [2]: incomes.std()
```

```
Out[2]: 49.794255862554017
```

```
In [3]: incomes.var()
```

```
Out[3]: 2479.4679169054948
```

1.1 Activity

Experiment with different parameters on the normal function, and see what effect it has on the shape of the distribution. How does that new shape relate to the standard deviation and variance?

In [ ]: