**Functions**

1. **Statistics basics in Python**
2. Mean

mean\_car\_speed = np.mean(car\_speeds)

1. Indexing numbers or strings

survey\_responses = ["none", "some", "a lot", "none", "a few", "none", "none"]

survey\_scale = ["none", "a few", "some", "a lot"]

survey\_numbers = [survey\_scale.index(response) for response in survey\_responses]

1. Skewness in data

from scipy.stats import skew

positive\_skew = skew(test\_scores\_positive)

negative\_skew = skew(test\_scores\_negative)

no\_skew = skew(test\_scores\_normal)

1. Kurtosis for outliers and distribution

from scipy.stats import kurtosis

kurt\_platy = kurtosis(test\_scores\_platy)

kurt\_lepto = kurtosis(test\_scores\_lepto)

kurt\_meso = kurtosis(test\_scores\_meso)

1. Median

median = numpy.median(test\_scores\_negative)

1. Standard deviation

std\_dev = nba\_stats["pf"].std()

1. Generating normal distribution

from scipy.stats import norm

points = np.arange(-1, 1, 0.01)

points1 = np.arange(-10, 10, 0.1)

probabilities = norm.pdf(points, 0, .3)

probabilities1 = norm.pdf(points1, 0, 2)

1. Pearson coefficient for correlation

from scipy.stats.stats import pearsonr

r, p\_value = pearsonr(nba\_stats["fga"], nba\_stats["pts"])

1. Covariance between variables

from numpy import cov

cov\_fta\_blk = cov(nba\_stats["fta"], nba\_stats["blk"])[0,1]