**Linear Regression**

Slopefloat

Slope of the regression line.

interceptfloat

Intercept of the regression line.

Rvaluefloat

Correlation coefficient.

Pvaluefloat

Two-sided p-value for a hypothesis test whose null hypothesis is that the slope is zero, using Wald Test with t-distribution of the test statistic. stderrfloat Standard error of the estimated gradient.

from scipy import stats

x = [1,2,3,4,5,6,7]

y = [2,4,6,8,10,12,14]

slope, intercept, r, p, std\_err = stats.linregress(x, y)

def linefunc(x):

return slope \* x + intercept

model = list(map(linefunc, x))

plt.scatter(x, y)

plt.plot(x, model)

plt.show()

from scipy import stats

import matplotlib.pyplot as plt

x = [1,2,3]

y = [28,29,28]

slope, intercept, r, p, std\_err = stats.

linregress(x, y)

def linefunc(x):

return slope \* x + intercept

model = list(map(linefunc, x))

print("model",model)

print(r)

xvalue=0

predictedy=linefunc(xvalue)

print("Y=",predictedy)

plt.scatter(x, y)

plt.plot(x, model)

plt.show()