Rayleigh Distoibution

Ray leigh distribution is used in singal processing. It has two paramenters. Scale- (Stondard devo deviation) decides how flat the distribution will be default 1.0) Size - The shape of the selvened away, or e.g: Desaw out a sample for sayleigh distribution with scale From numpy import Jundom X = sandom. sayleigh (Scale = 2, Size = 2,8)) Visualization of Rayleigh Distribution

From numpy import standom
emport matploshib. Pyplot as plt
single distiplos (standom as Sing Plt. Show ()

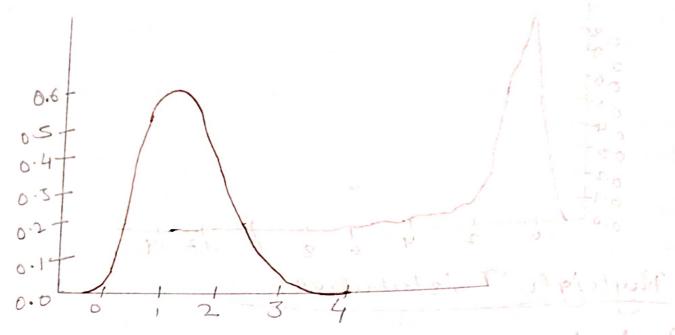
Show ()

Visualization of Ray leigh Distribution

Signature of Public Show ()

Signature of Ray leigh Distribution

Signature



Tageto Distaibution (1. 6920 21 nothodictails della un?

A distribution following pareto's law i.e. 80-20 distribution 120% foctors cause 80% out come).

Ultimos two parameternicos (nousirab evet bushable) - 41112

(0.1 Alvelob ed llies

a - Shape of the retwined away parameter, IT -

Size - The shape of the sieturned assign.

eg: Deraw out a sample for posselo distribution with shape

from numpy import random $x = rondom \cdot paseto (a = 2), size-(2, 5))$

Output

1.3300 1 [0.77719 0-480 0.1650 [4.71001

Mendinamen at Min 0.13.28] Hoomis Banco 1000

they so solary. Gulachyrore troquis. 505 80 0209038 7000ms

Visualization of Pareto Tistoibution from numpy import sondon and soon signed import matplettib . pyplot as plt import seaboon as sns ens. distplot (rondom. pareto (a = 2, size = 1000) Kde z false) plt-show () 200 + 11 (0001 = 515 + (0= 5) = 10 = 1000) 1 + 005 sons distribut (OU[2x10], whe = False 1 + 004 100 + Zipt Distribution Zipf distributions are used to sample data based on zipt's law. Zipfis Law: In a collection the note common tom is 1/n times of the most common ferm. 8.9 5th common word in english has occurs nearly 1/5th fines as of the most used word. It has two parameters: a - distribution parameter. size - The shape of the redument may. eg Doaw out a sample for zipt distribution with distribution parameter 2 with size 2x3 from numpy import random M= romtom, 2/pf (922, 8/202(2/5)) audpad (m) LU 13]3 [182]]

Visualization of Zipp Distribution Sample 1000 points but plotting only ones with valued 10 for more meaningful charit trom mondini habert som closes impost matplot lib. pyplo javordz. Na impost seaborn as M2 sondom. zipf (922, size 21000) sns. distplot (n.[71<10], kde = false) pld. show()