Lecture3-4svg

Numpy → Complex → (Numpy)   **MatplotLib**

element-wise

1) mathematical operation
2) square root, mean, median, coordinates, random generate
   Vectorization, Matrices, Deep learning → tensors
3) Basic maths
4) Numpy ① reshape ② Vectorization ③ Broadcasting

np.sum (Variable1, Variable2)
np.sqrt

(53,15)
(53,15,)
(53)
(15)

np.mean
np.sd

Pandas → Load Dataset → different types Data sources
            ↳ information
          → Datatype change, shape, tabular form etc _____

Visualization tool
Seaborn → Builtin Datasets → external file source → call that function → pandas
Numpy   Dataframe
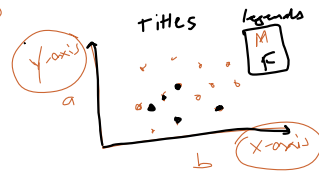MatplotLib

MatploILib
1) Graphical Library
2) Linear graph, histogram, scatter plot, curves, multiples graphs |Statistics|
→ Graphs
Coles Dataset
Built in dataset → use MatplotLib

Visualization matplotlib

→Excels CSV, Txt →external sources

Numeric string Boolen

Titles   Legends

Y-axis   M F
a   X-axis
             b

Z AS
a b c d e
        M F

Scatle plot

How to choose your graph

→ relationship → Linear graph
                → Scatter plot   → ✓✓

→ Distribution → histogram   → Numerical
                → Boxplot   → categorical → strings Boolean

→   Essols → Boxplot
                → Violin plot

Y-ax | ∝ ✓
     |_____
     X → Var   hve → cols

Statistical Analysis → mean, mode, median, Var, S.D
                      ↳ Hypothesis testing

→ dependent
  independent

↳ One way ANNova test
↳ Two way Annor tst
↳ Distribution
↳ Stationary