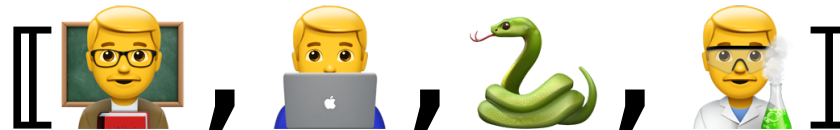


Lecture Notes for **Machine Learning in Python**



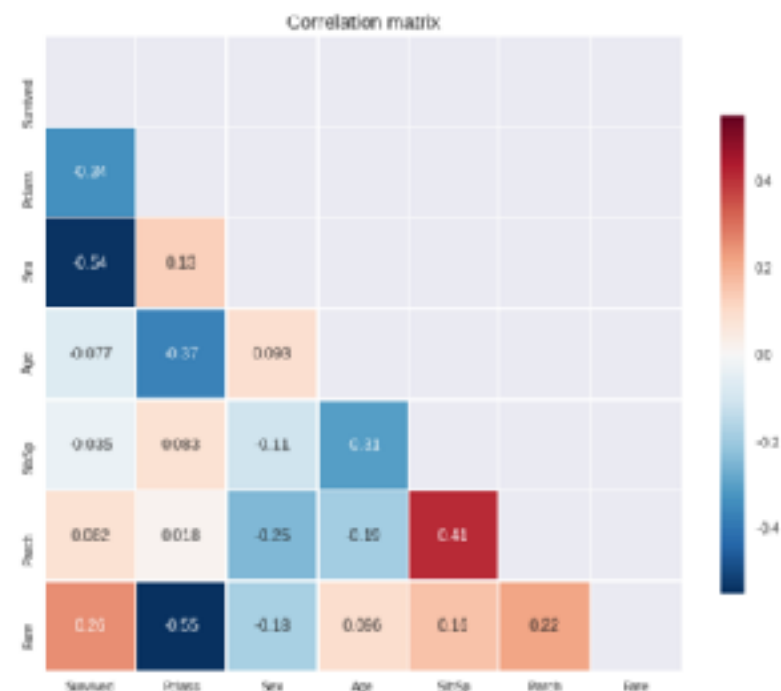
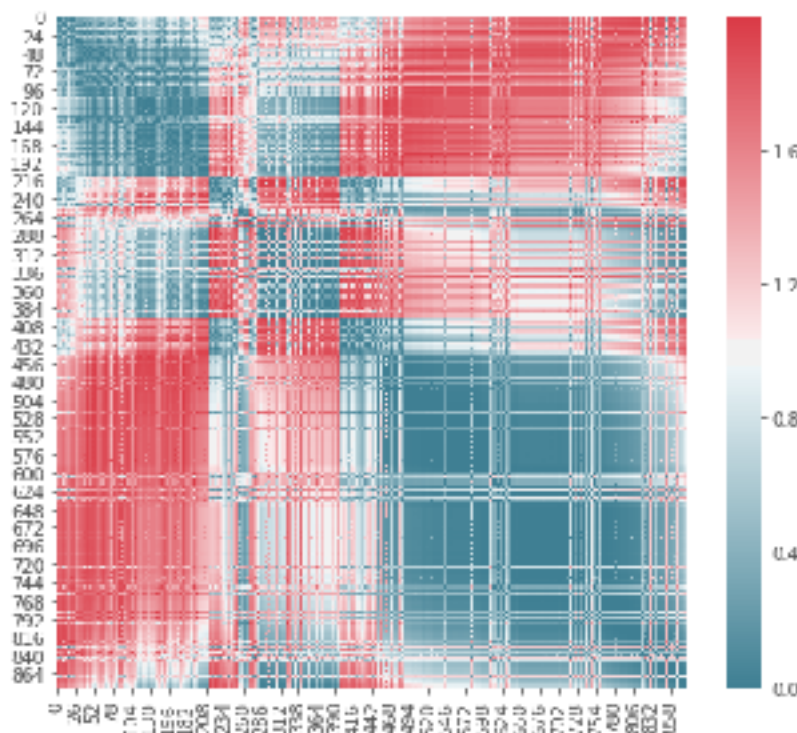
Professor Eric Larson
Visualization and Preprocessing

Class Logistics and Agenda

- Finish Visualization Demo
- Town Hall
- Flipped Assignment: Lab One
- Dimensionality Reduction
 - PCA
 - Sampling
 - Kernel Methods
- Images

What is the difference in these plots?

PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Embarked	2	3	male	Q	S	
0	1	0	3	Harand, Mr. Owen Haris	male	22.0	1	0	AG 21171	7.2500	S	0	1	1	0	1
1	2	1	1	Cummings, Mrs. John Bradley (Florence Briggs Th	female	36.0	1	0	PC 17586	71.2933	C	0	0	0	0	0
2	3	1	3	Holdenon, Miss. Laina	female	28.0	0	0	STON/O2. 3101282	7.9250	S	0	1	0	0	1



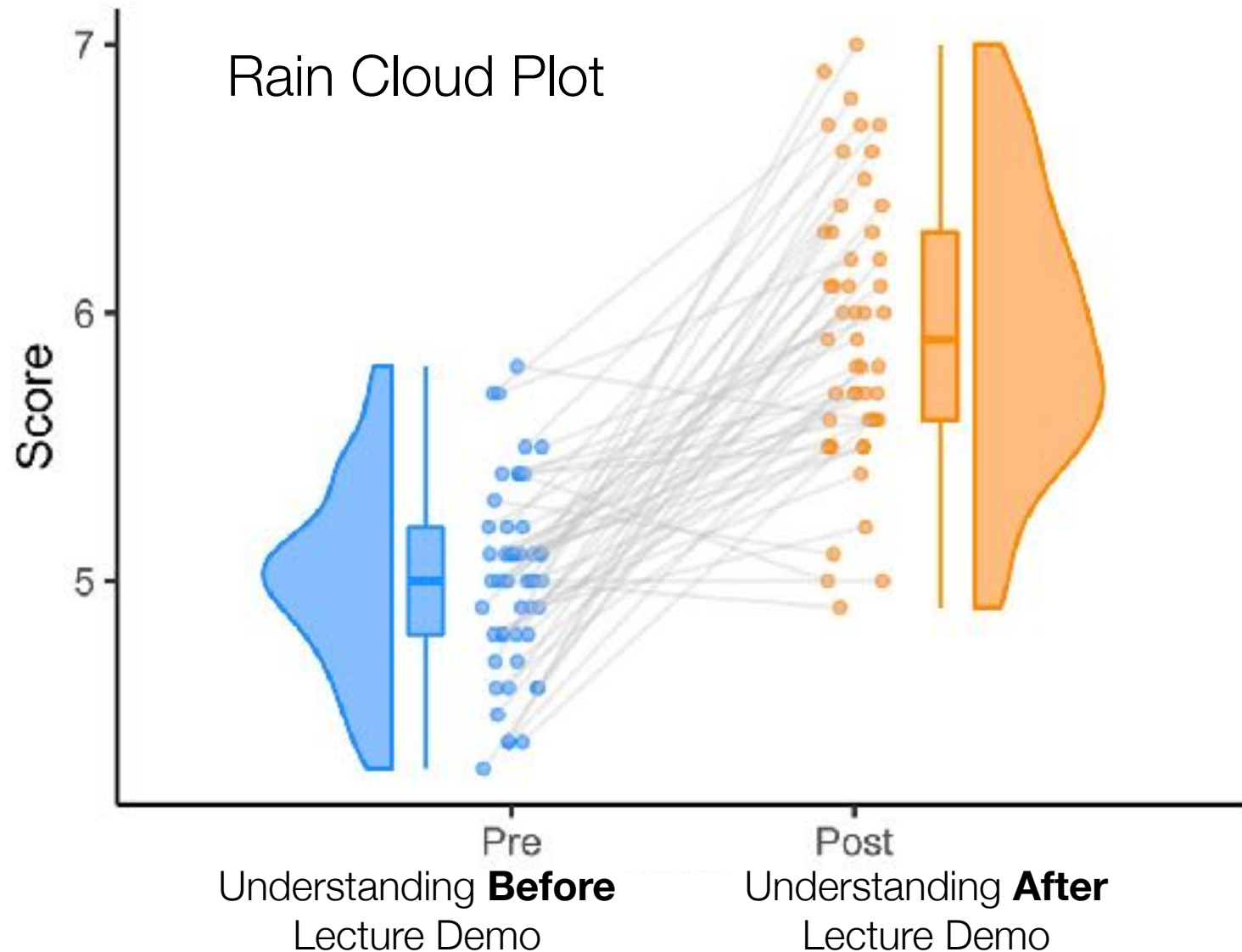
- You tell me what conclusions we are getting from these graphs
 - Histogram
 - KDE
 - HeatMaps and Correlation
 - Scatter and Scatter Matrix
 - Box / Violin / Swarm



03.Data Visualization.ipynb

Matplotlib
Seaborn
Plotly

Now you have visualization building blocks



Lab One: Town Hall

