



# Maximum Absolute Scaling

# MaxAbsScaling

- Scales the variable between -1 and 1

$$X_{\text{scaled}} = \frac{X}{\max(|X|)}$$

# MaxAbsScaling: example

Price
100
90
50
40
20
100
50
60
120
40
200

Max = 200



Obs.

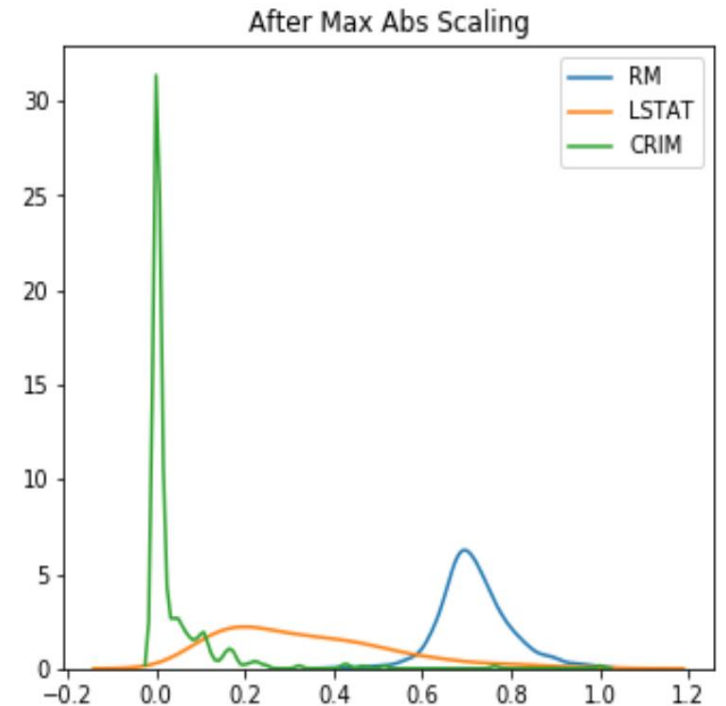
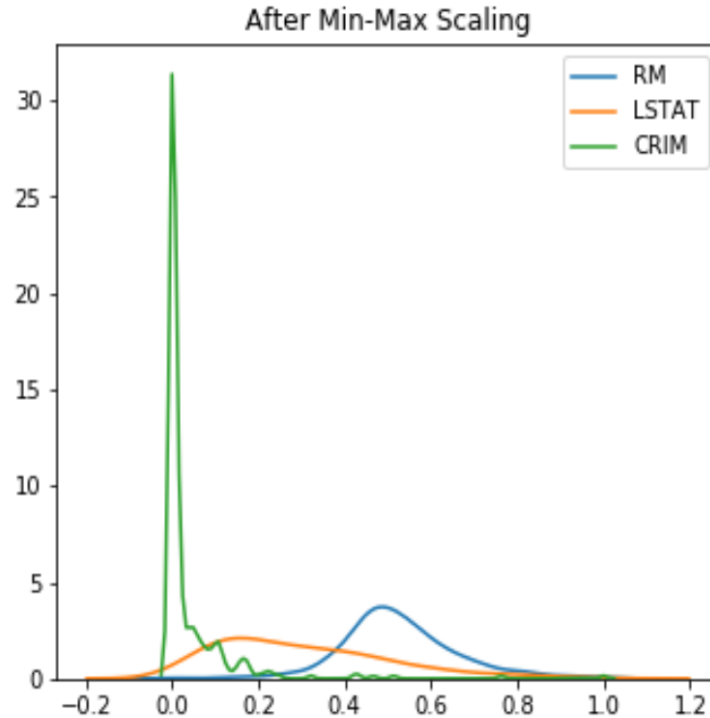
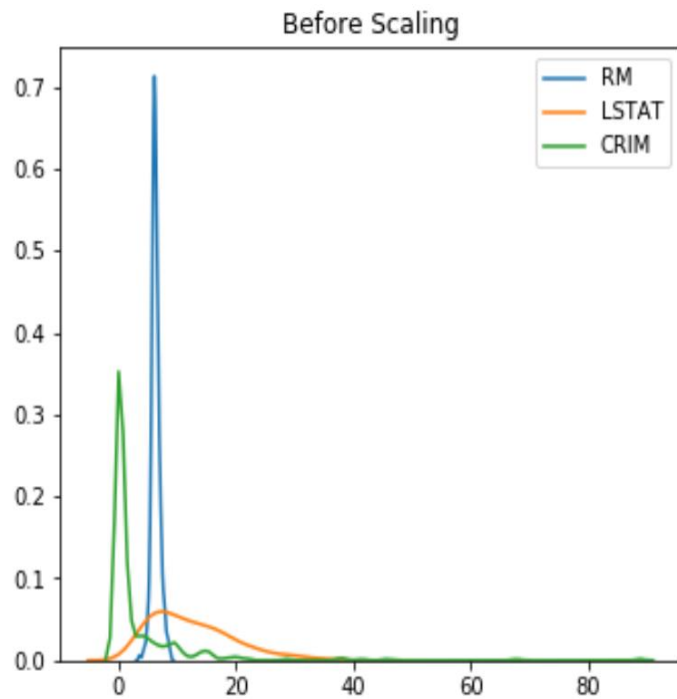
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Max value

Price
0.50
0.45
0.25
0.20
0.10
0.50
0.25
0.30
0.60
0.20
1.00

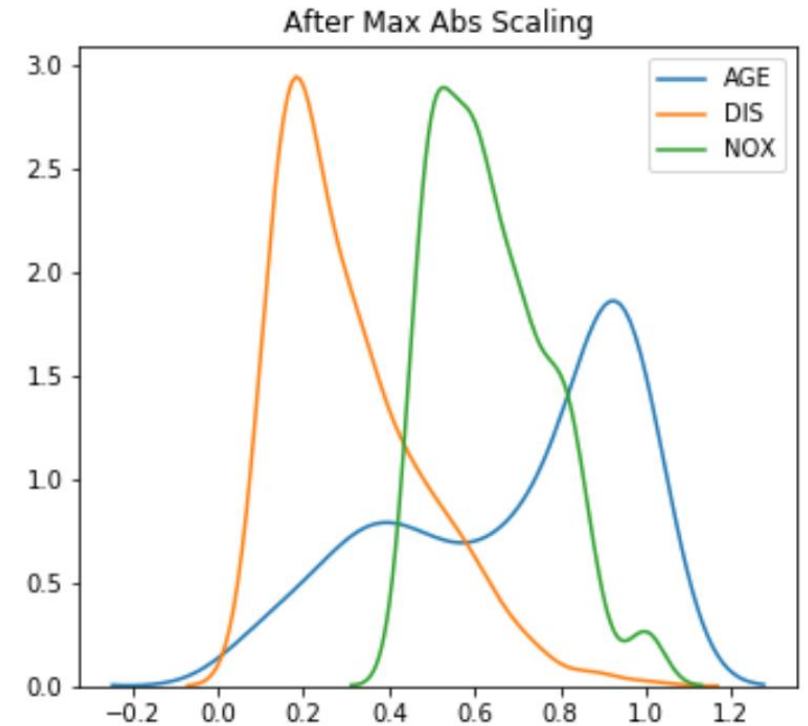
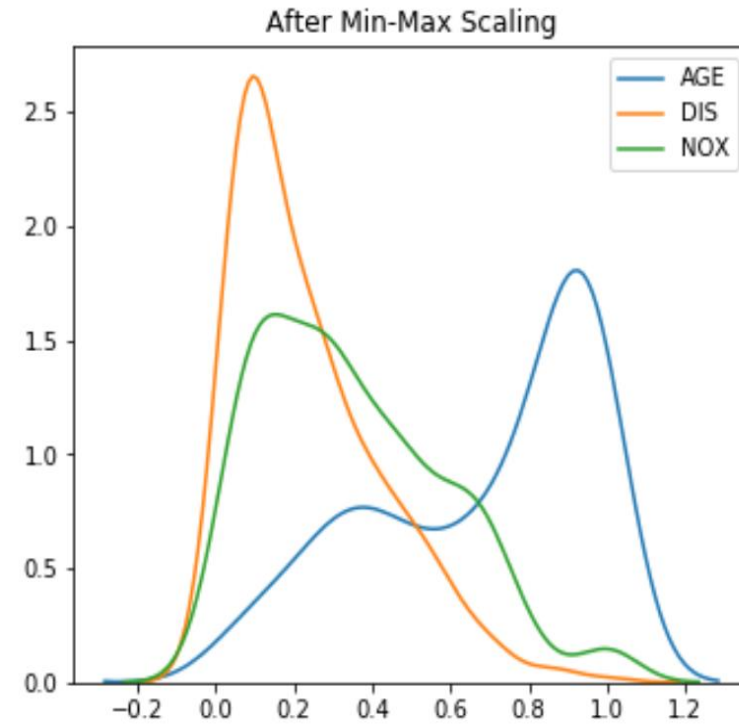
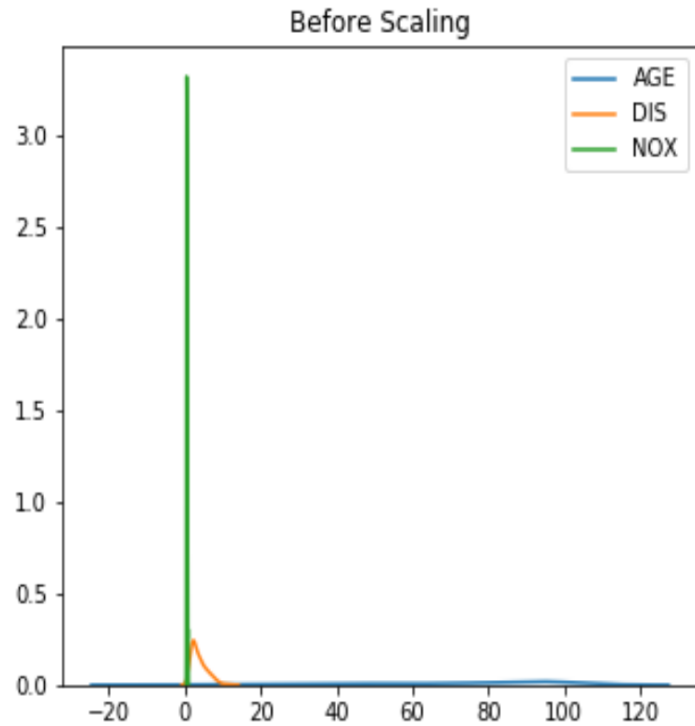
# MaxAbsScaling: summary

- Mean not centred
- Variance not scaled
- Scikit-learn recommends use with:
  - data that is centred
  - sparse matrices

# MaxAbsScaling: Notebook



# MaxAbsScaling : Notebook



# Accompanying Jupyter Notebook



- Read the accompanying Jupyter Notebook
- MaxAbsScaling with Scikit-learn

# THANK YOU

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