

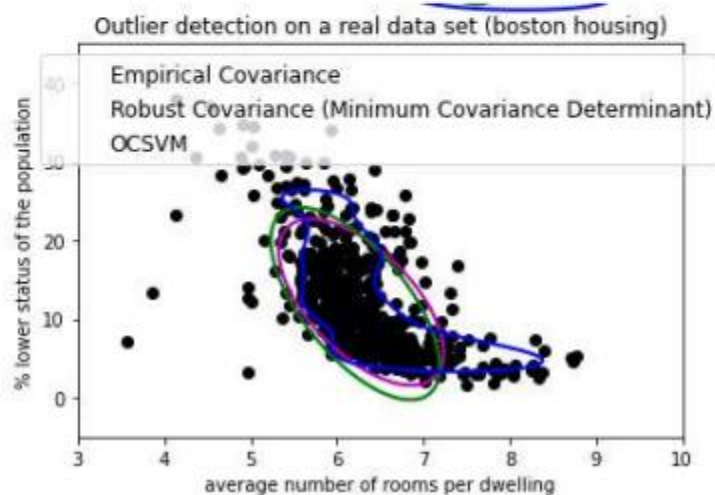
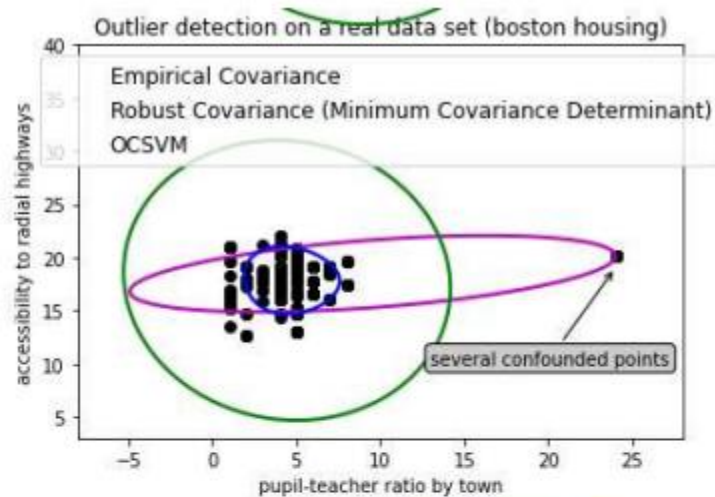
Lopez, Daryl Jake F.

1. Concatenating

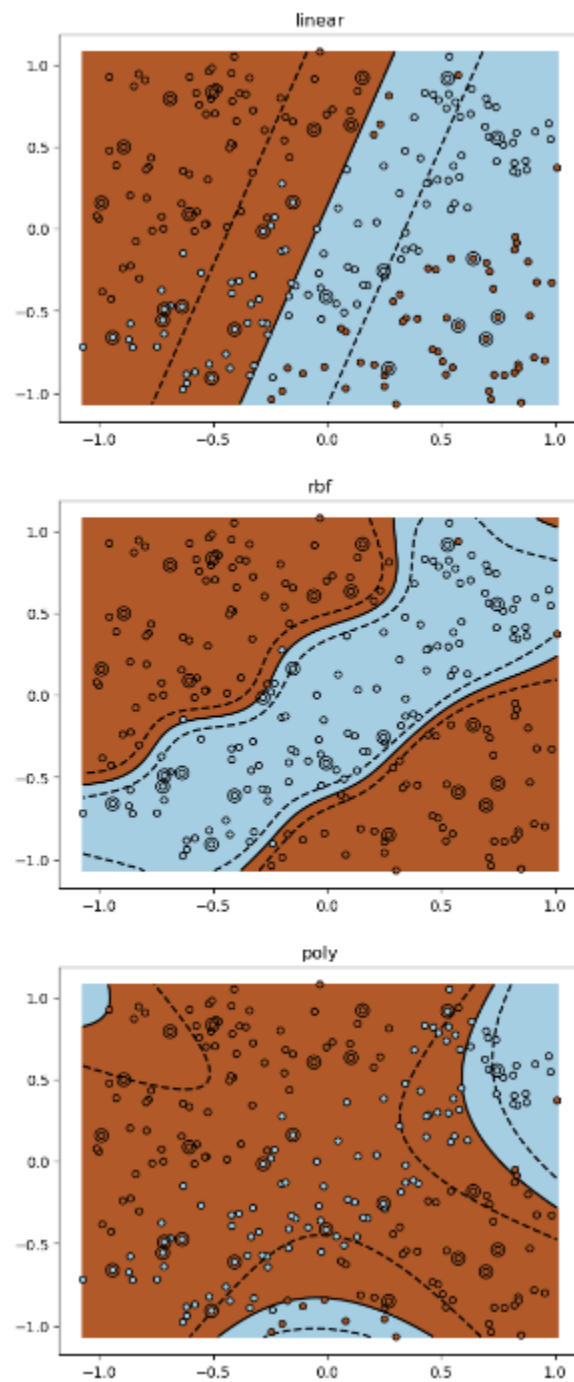
[illegible]

[illegible]

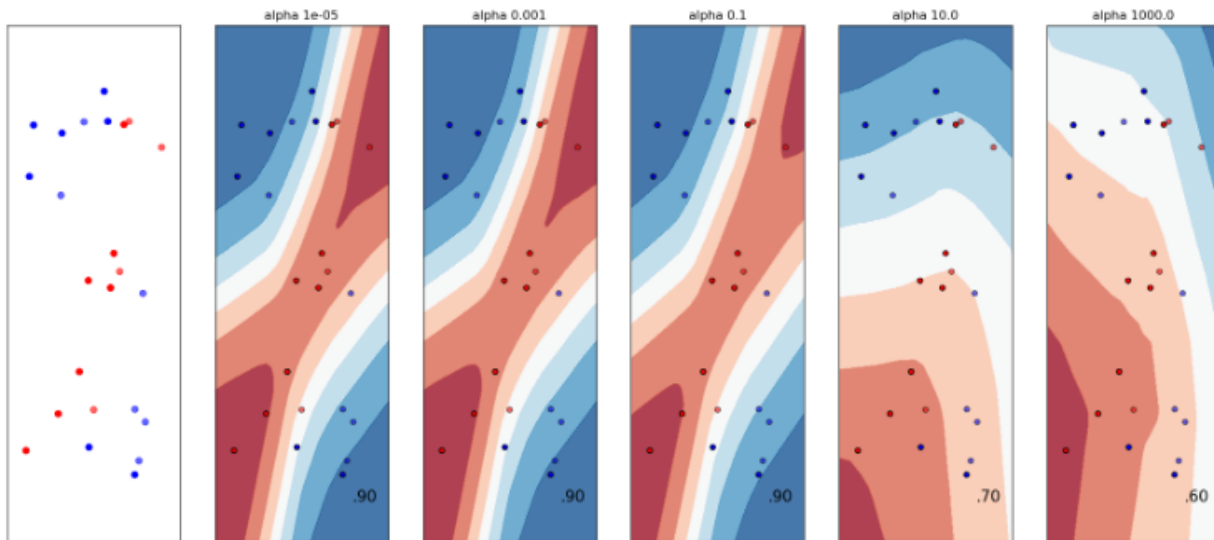
2. Applications – Boston Housing Dataset



3. Support Vector Machine - Iris Dataset



4. Neural Networks

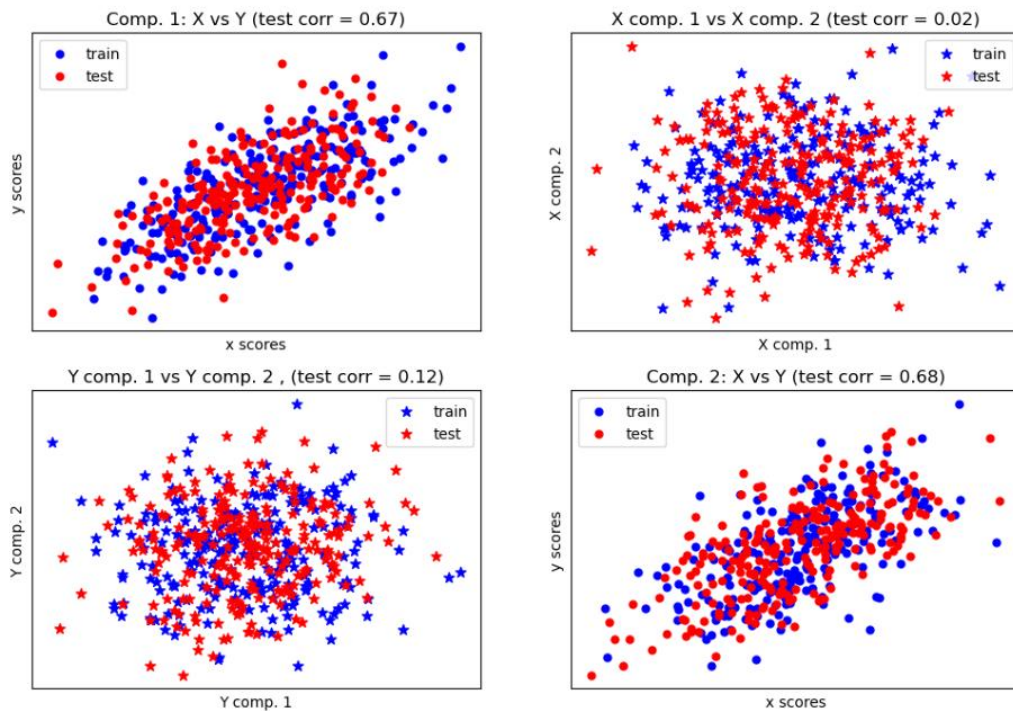


5. Cross Decomposition

```

Corr(X)
[[ 1.  0.46 -0.02 -0.02]
 [ 0.46 1.  0.  -0.04]
 [-0.02 0.  1.  0.49]
 [-0.02 -0.04 0.49 1.  ]]
Corr(Y)
[[ 1.  0.49 -0.03 0.01]
 [ 0.49 1.  -0.01 0.04]
 [-0.03 -0.01 1.  0.53]
 [ 0.01 0.04 0.53 1.  ]]

```



True B (such that: $Y = XB + \text{Err}$)

```
[[1 1 1]
 [2 2 2]
 [0 0 0]
 [0 0 0]
 [0 0 0]
 [0 0 0]
 [0 0 0]
 [0 0 0]
 [0 0 0]
 [0 0 0]]
```

Estimated B

```
[[ 0.9 1. 0.9]
 [ 2. 2. 1.9]
 [-0. 0. -0. ]
 [-0. -0. -0. ]
 [ 0. 0. 0. ]
 [-0. 0. -0. ]
 [ 0. 0. 0. ]
 [ 0.1 -0. 0. ]
 [-0. 0. 0. ]
 [ 0. -0.1 -0. ]]
```

Estimated betas

```
[[ 1. ]
 [ 1.9]
 [ 0.1]
 [ 0. ]
 [ 0.1]
 [-0. ]
 [ 0. ]
 [ 0.1]
 [-0. ]
 [ 0. ]]
```