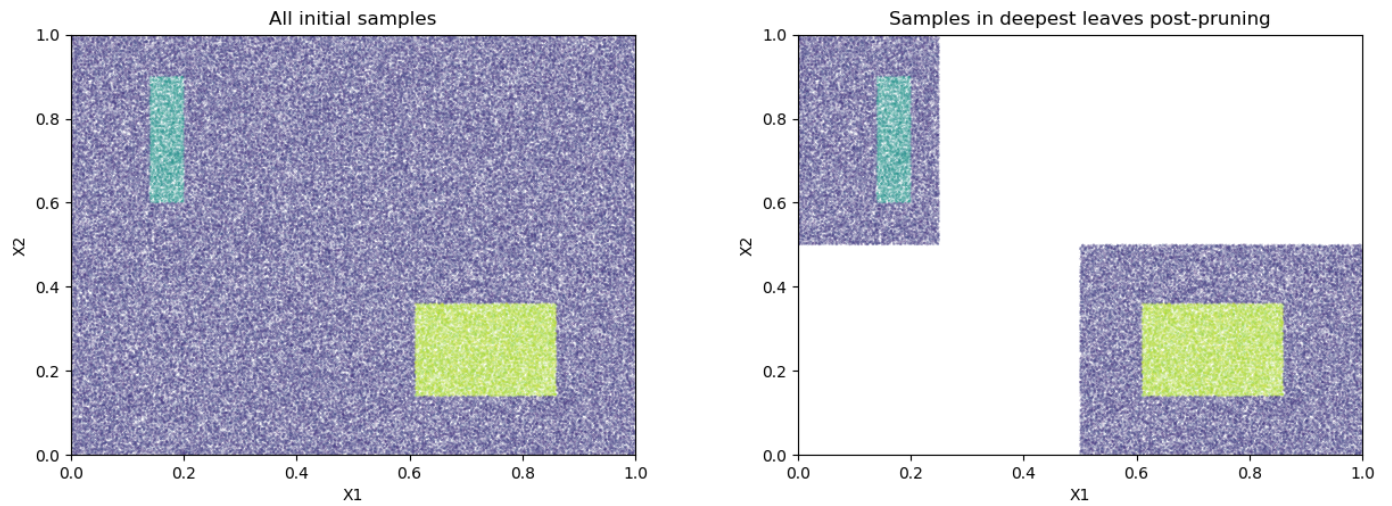


### 1A. Initial Total Number of Nodes: 85

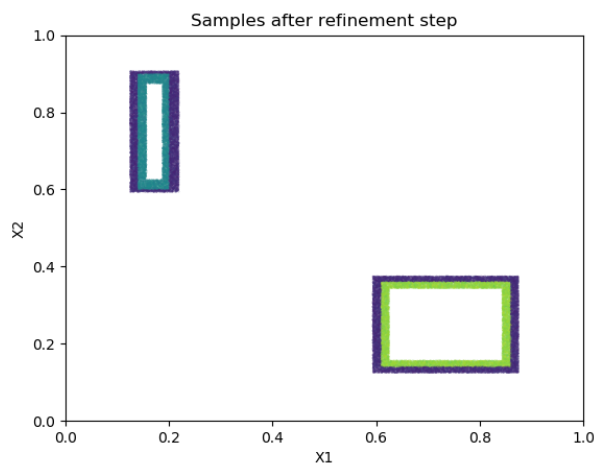


### 1B.

Total Number of Nodes Post-Pruning: 37.

Compared with the figure in 1A. Samples in deepest leaves post-pruning is composed of 2 parts in 1A that contains blue & green regions, representing the parts with diverse labels.

### 1C.

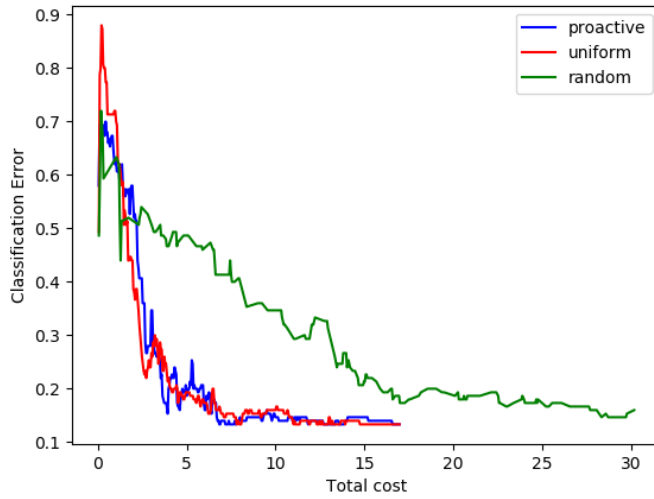


Number of deepest leaves: 208.

The R2 value on test data is: 0.8703460244575911

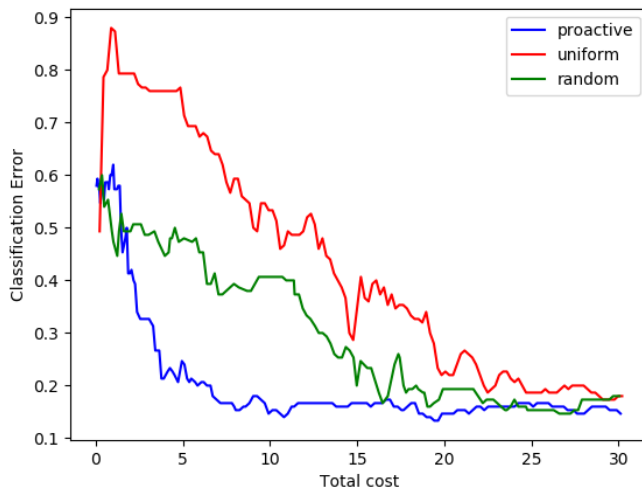
Compared with 1A and 1B, plot in 1C contains only data on the boundary.

## 2. Cost Ratio = 5



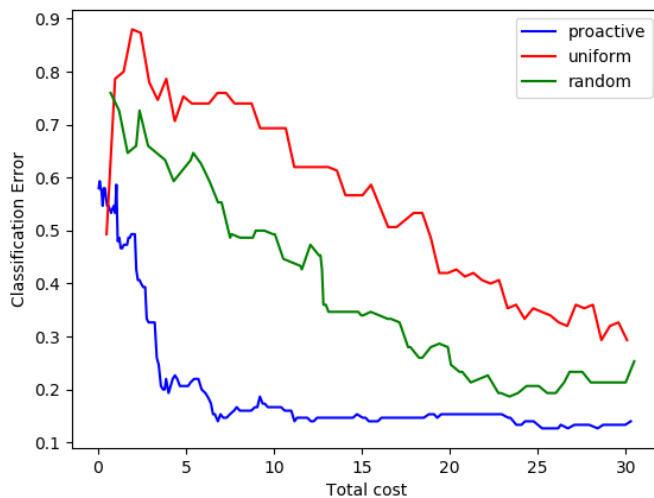
# of query	uniform-cost	non-uniform cost
proactive	349	1
uniform	350	0
random	86	110

## Cost Ratio = 1.1



# of query	uniform-cost	non-uniform cost
proactive	98	74
uniform	137	0
random	68	61

## Cost Ratio = 0.5



# of query	uniform-cost	non-uniform cost
proactive	9	148
uniform	62	0
random	48	32