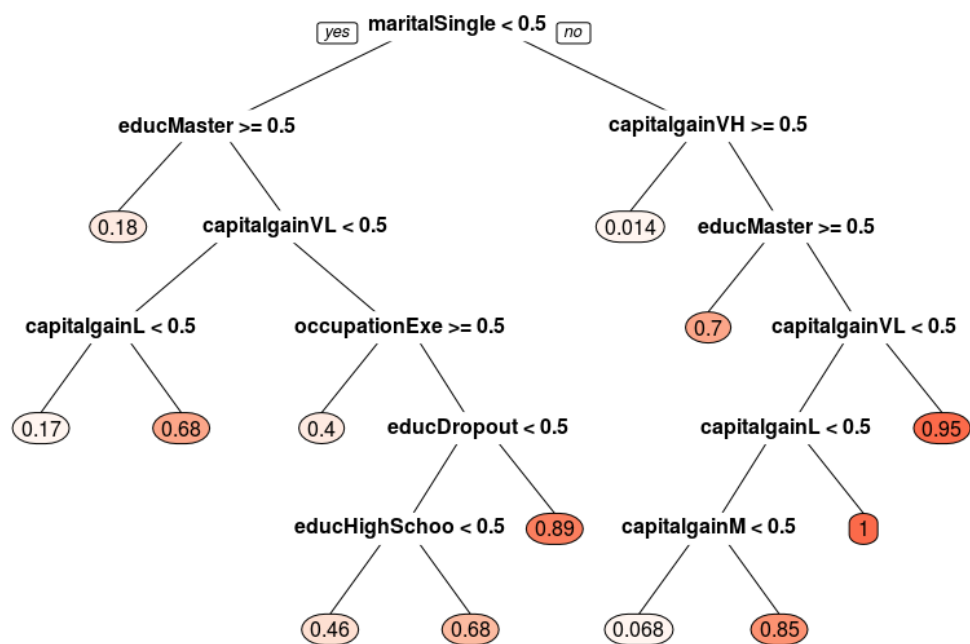
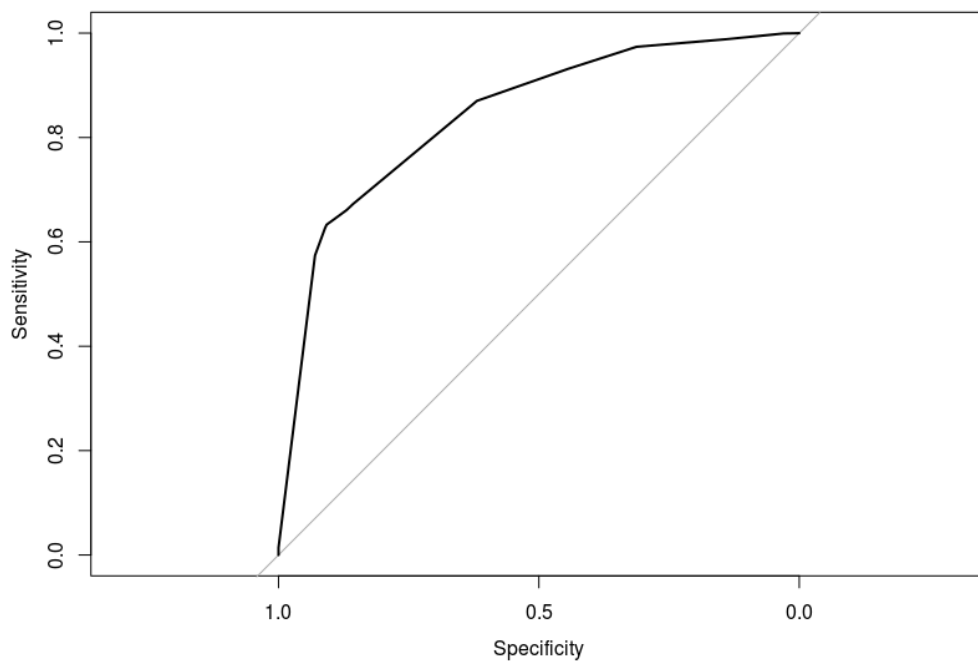


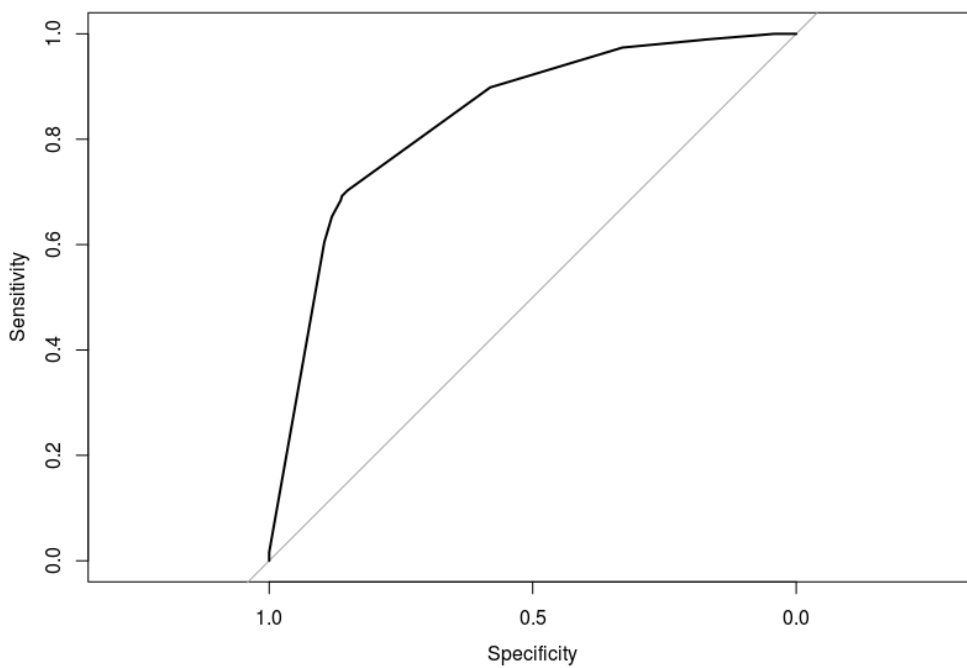
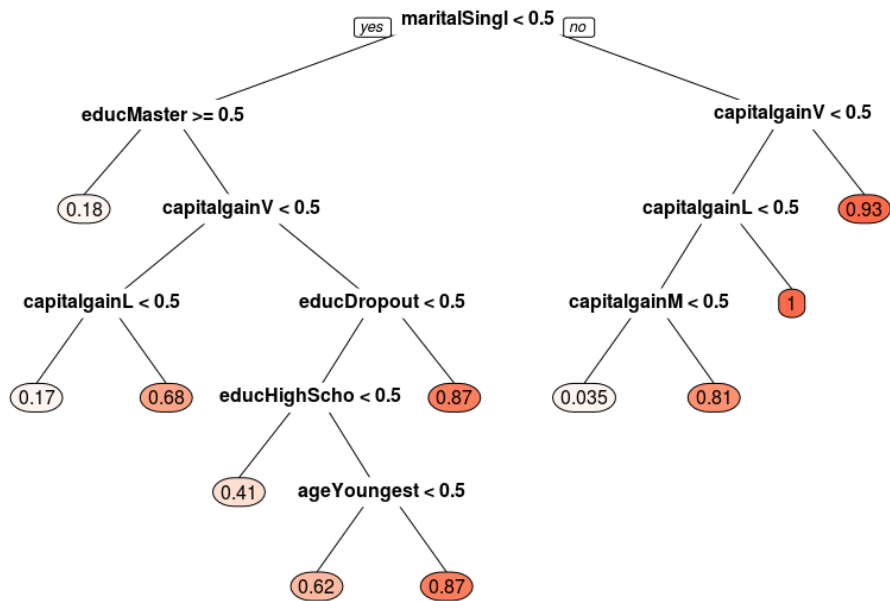
Gini 80:20



Confusion Matrix

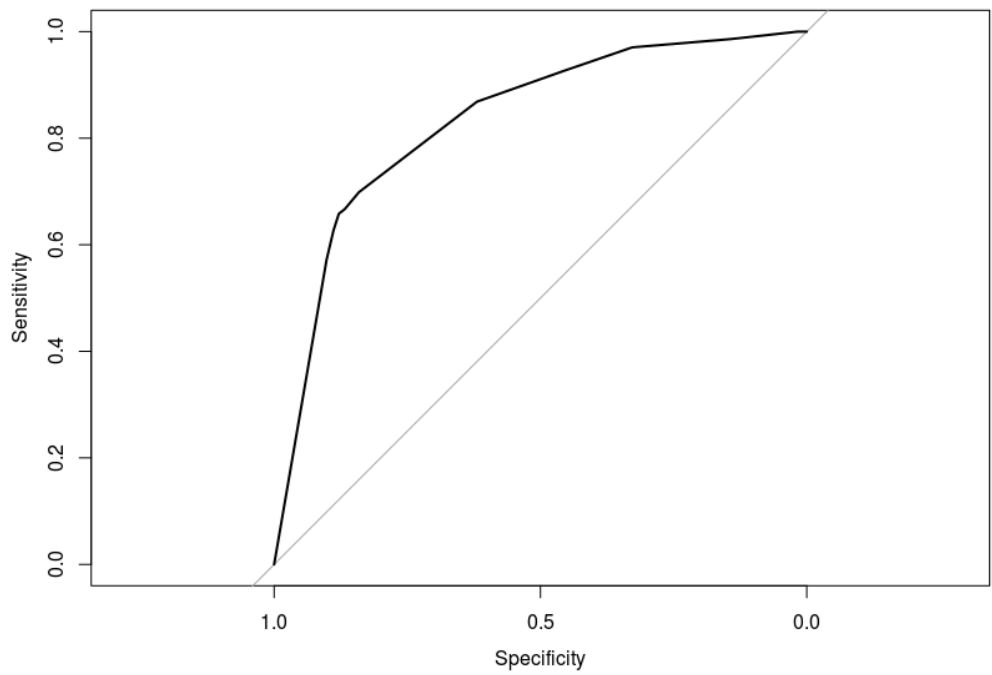
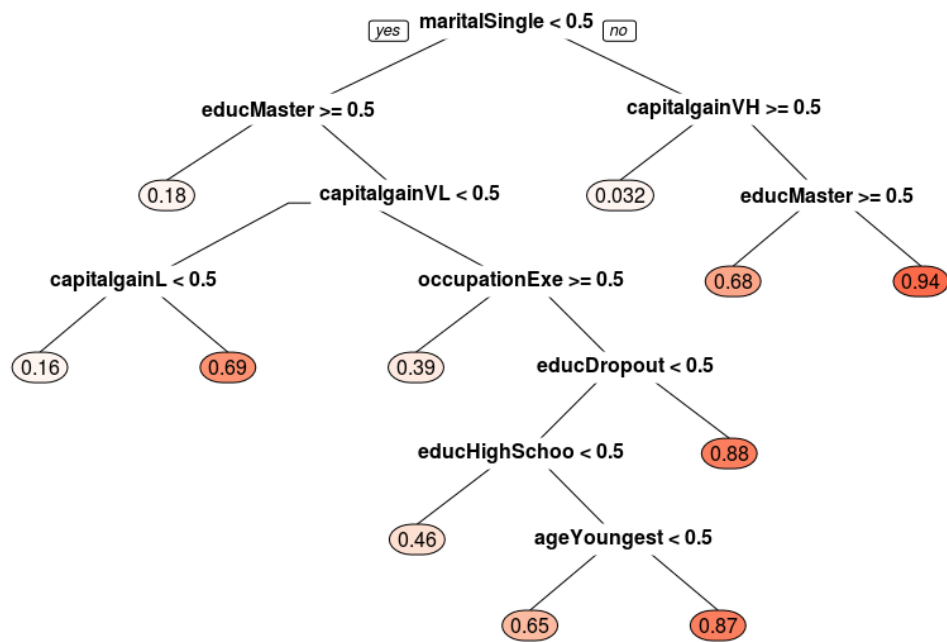
```
pred    0    1
      1 1299 3021
Accuracy 0.3006944
Recall 0.3006944
Precision 1
F-Score 0.4623599
AUC 0.8421367
```

Gini 10-fold



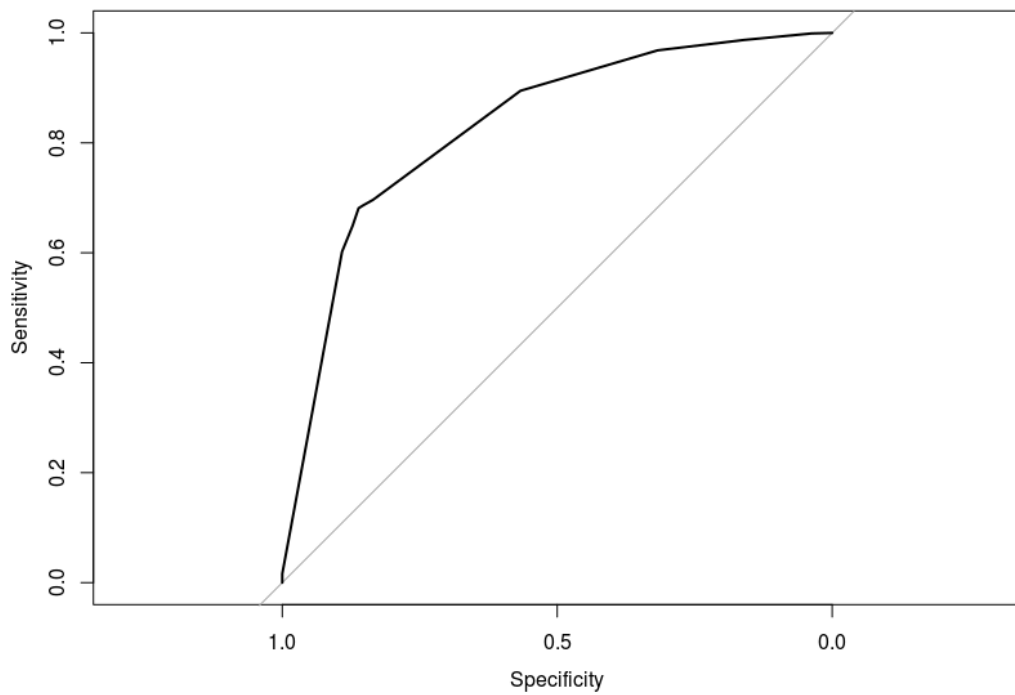
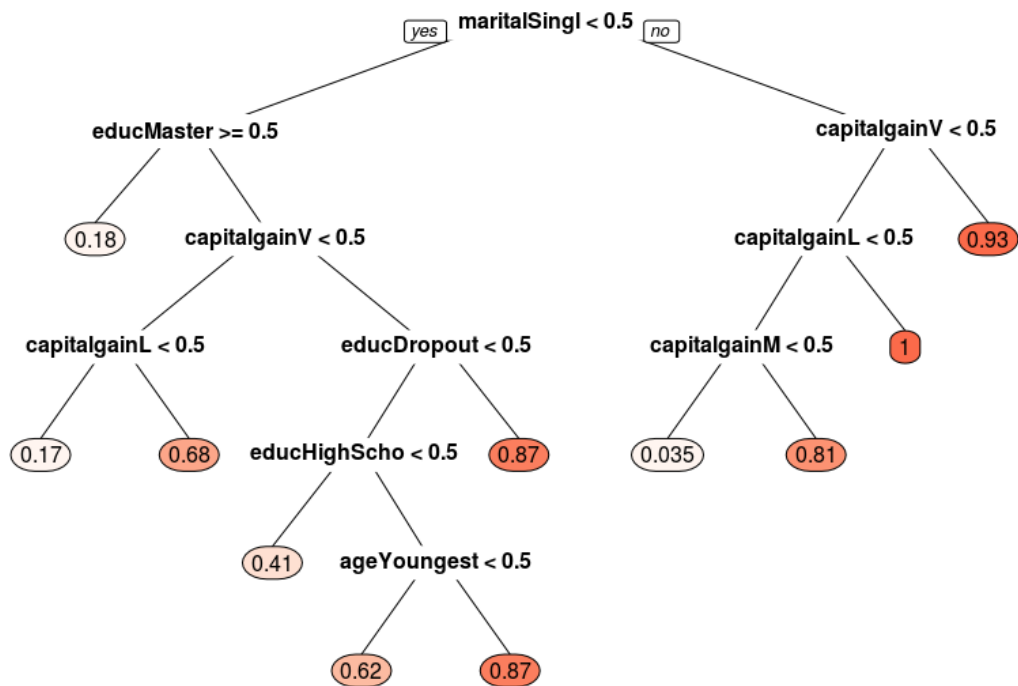
```
pred  0  1
    0  727 312
    1  525 2756
Accuracy 0.80625
Recall 0.6997113
Precision 0.5806709
F-Score 0.6346574
AUC 0.8394025
```

Ent 80:20



```
pred  0  1
0  805 397
1  495 2623
Accuracy 0.7935185
Recall 0.6697171
Precision 0.6192308
F-Score 0.6434852
AUC 0.8325209
```

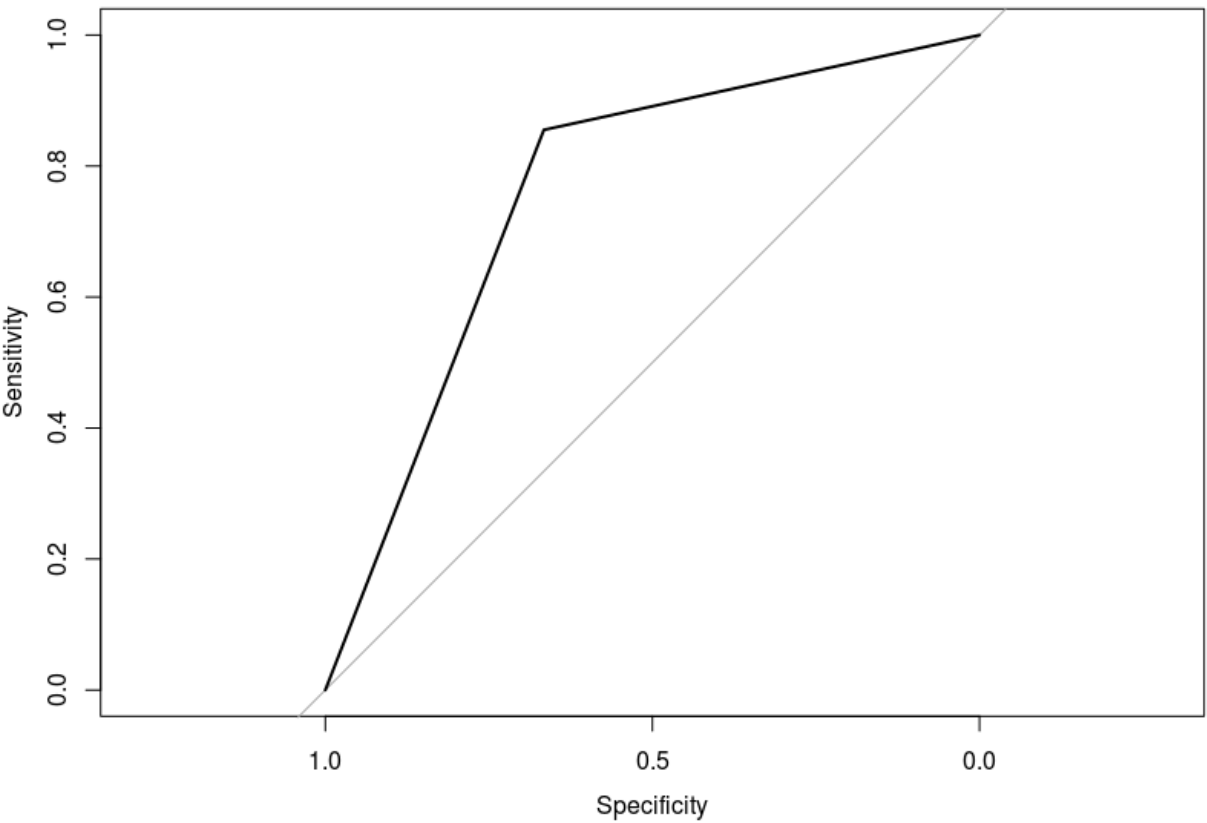
ent 10-fold



```
pred  0  1
    0 735 318
    1 562 2705
Accuracy 0.7962963
Recall 0.6980057

Precision 0.5666924
F-Score 0.6255319
AUC 0.8296176
```

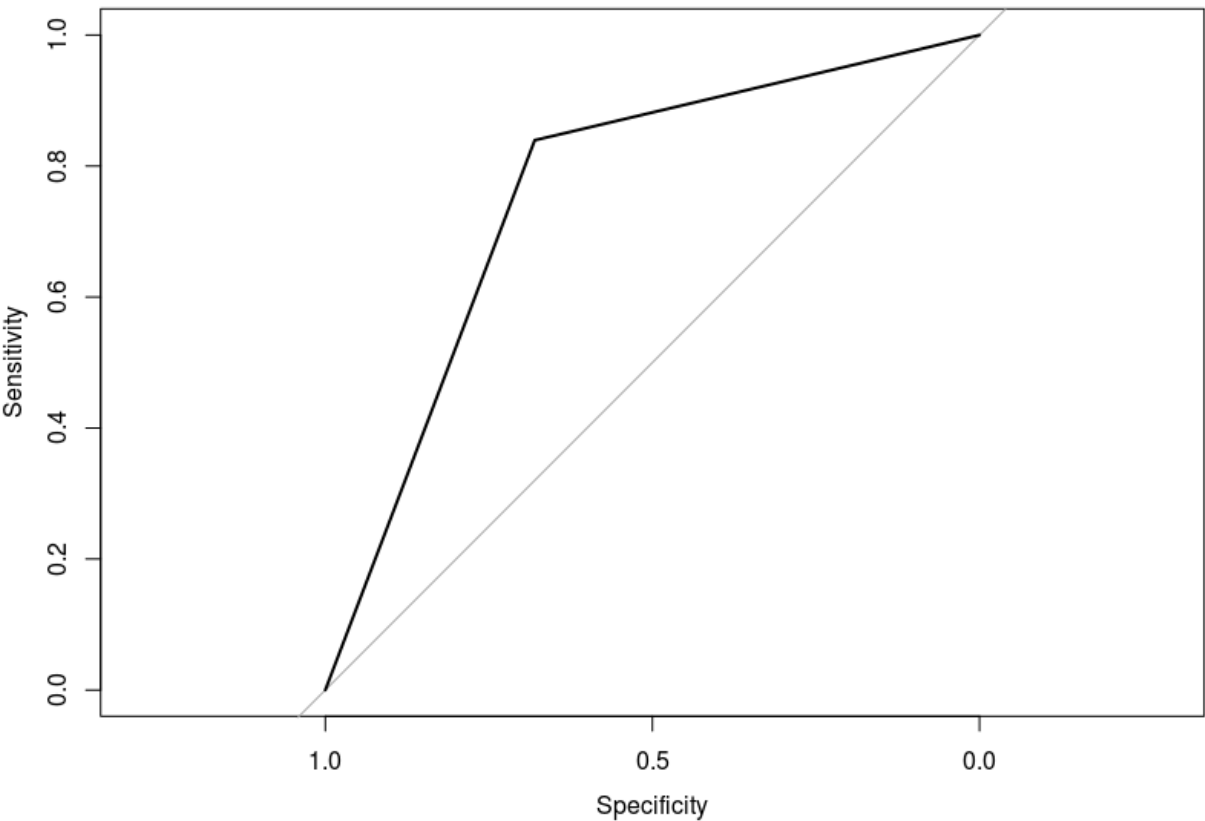
naive Bayes 80:20



```
pred  High  Low
   High 857  439
   Low  430 2594
Accuracy 0.7988426
Recall 0.6612654

Precision 0.6658897
F-Score 0.6635695
AUC 0.7605742
```

naive bayes 10-folds

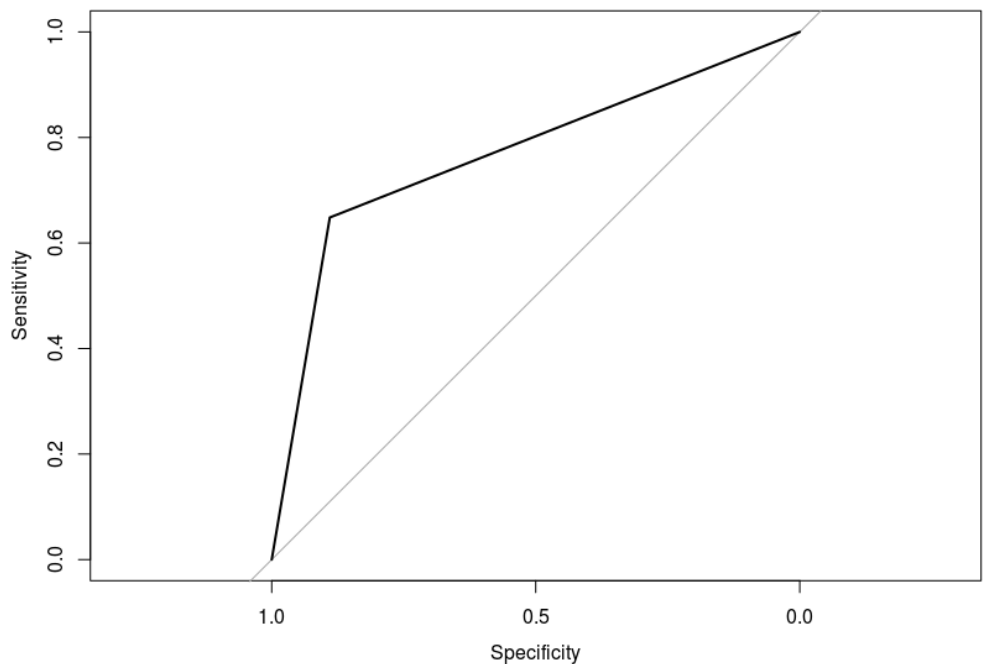
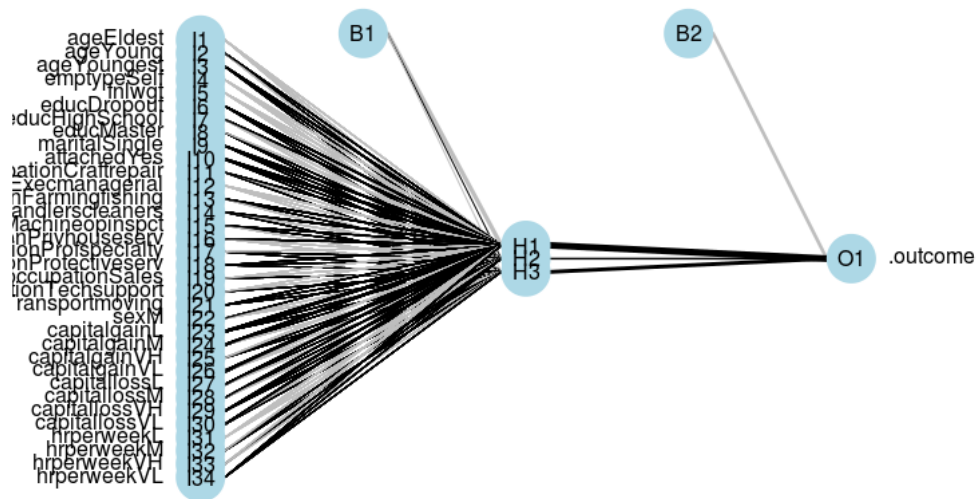


```
pred  High  Low
    High 875 487
    Low 412 2546
Accuracy 0.7918981
Recall 0.6424376

Precision 0.6798757
F-Score 0.6606267
AUC 0.7596543
```

nnet 1hidden layer 80:20

technical difficulties: took 1000 records

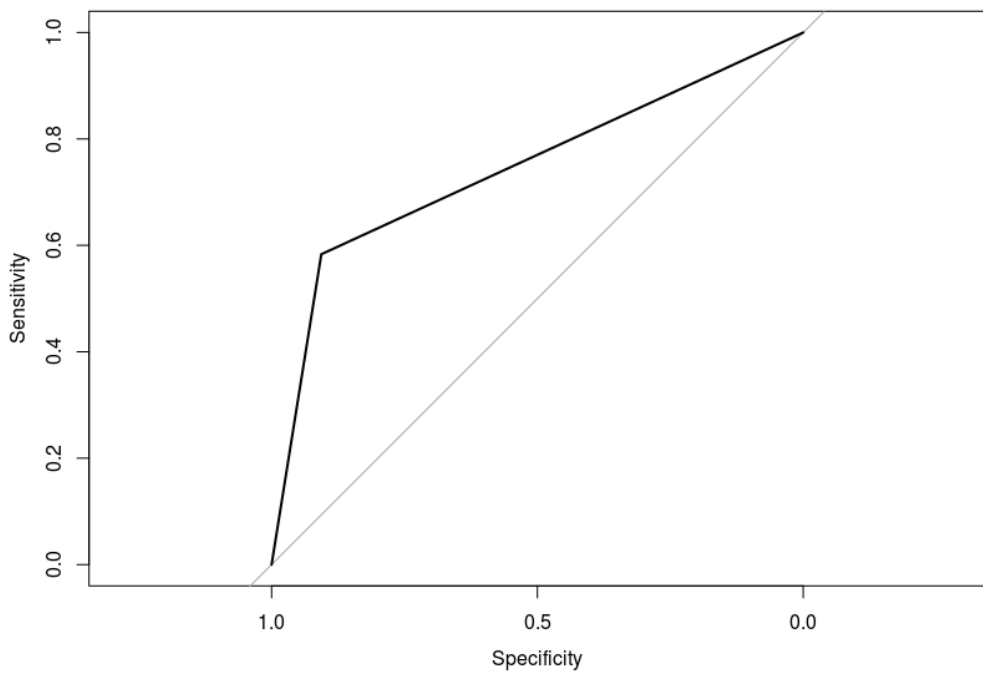
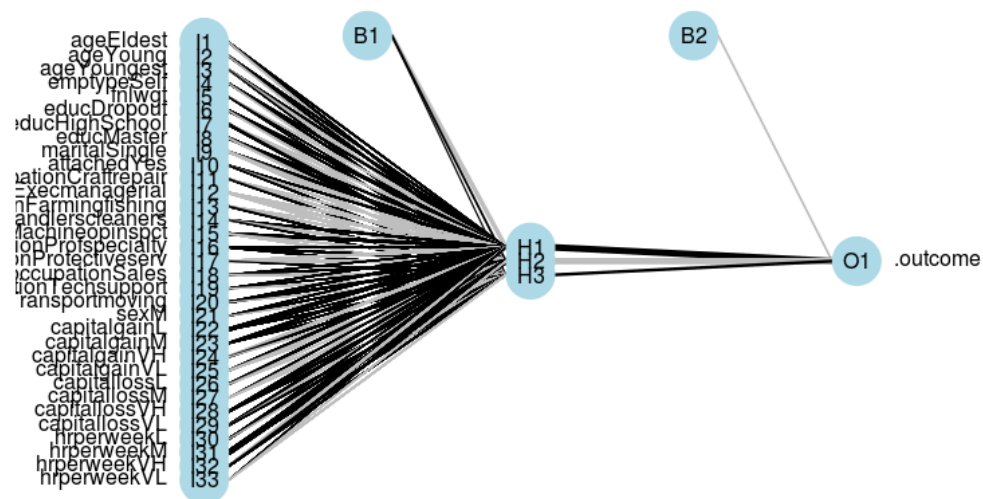


```
predicted High Low
  High   59  23
  Low   32 186
Accuracy 0.816667
Recall   0.7195122

Precision 0.6483516
F_Score  0.6820809
AUC      0.7691519
```

nnet 1 hidden layer 10-fold

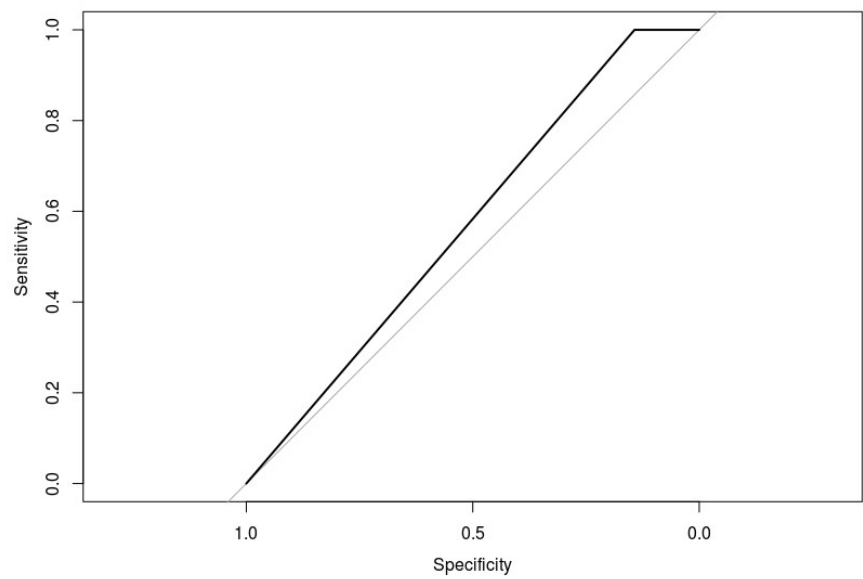
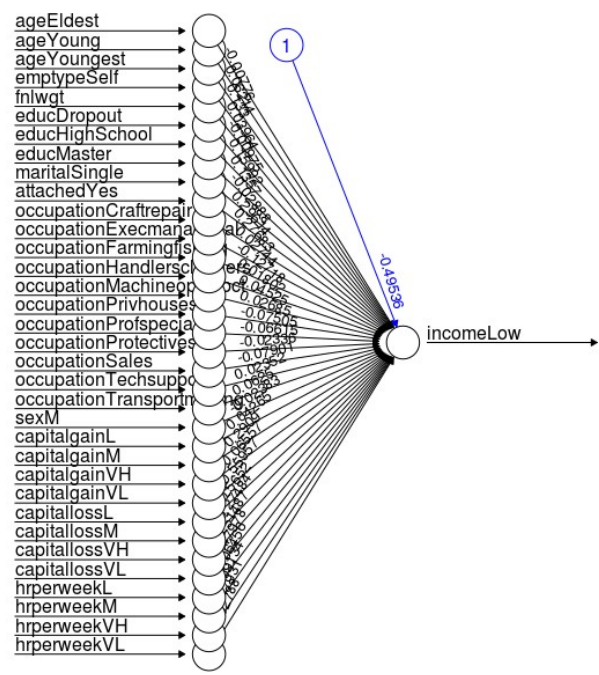
technical difficulties: took 1000 records



predicted High Low
High 35 13
Low 25 126
Accuracy 0.8090452
Recall 0.7291667
Precision 0.5833333
F_Score 0.6481481
AUC 0.7449041

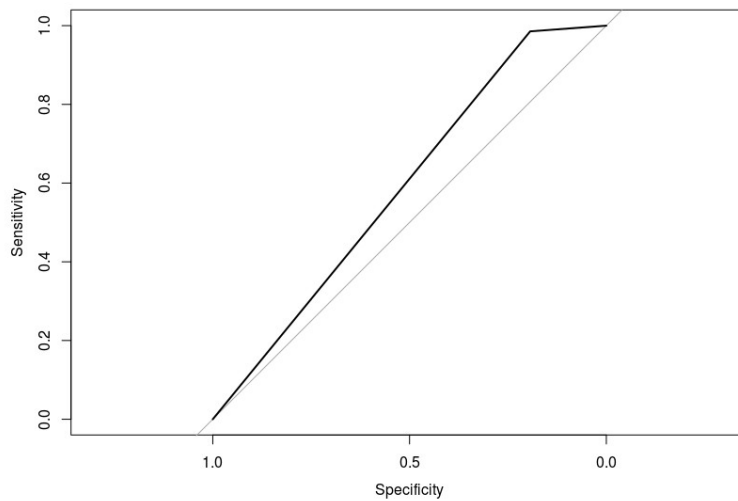
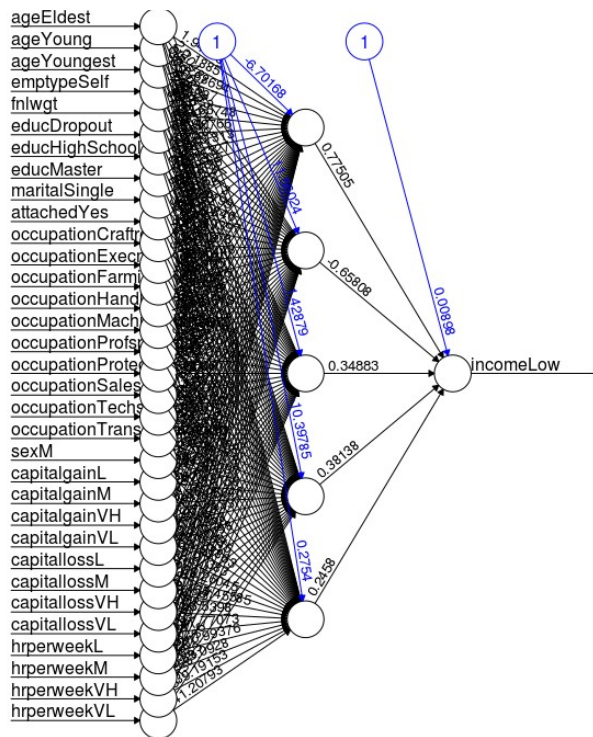
neuralnet 80:20

technical difficulties: took 1000 records



```
predicted  0  1
          0 10  0
          1 49 141
Accuracy 0.755
Recall 1
Precision 0.1694915254
F_Score 0.2898550725
AUC 0.5847457627
```

ann folds



```

predicted  0  1
           0  6  1
           1 25 68
Accuracy 0.74
Recall 0.8571428571

Precision 0.1935483871
Precision 0.1935483871
AUC 0.5895278167

```

in 80:20 sampling, GINI has highest AUC

in 10-folds, GINI has highest AUC

classes=2

```
      size max_diss av_diss isolation
[1,] 15508   127832 46042.08 0.8968716
[2,]  6093   1195515 59702.55 8.3877542
```

```
db<-dbscan(d,eps=661673,minPts = 6093)
```

```
DBSCAN clustering for 21601 objects.
Parameters: eps = 661673, minPts = 6093
The clustering contains 1 cluster(s) and 1 noise points.
```

```
  0      1
  1 21600
```

Available fields: cluster, eps, minPts

Noise=1

kmeans with k=1

SSE =0

kmeans with k=2

SSE =58.9

kmeans with k=1

SSE =79

Silhouette Coefficient:

```
PAM
0.09793531588 0.05836528851
0.08016837359
CLARA
0.14558047955 0.05815519407
0.1177633433
```