COMP3608 Assignment 2

May 9, 2021

1. Aim

2. Data

3. Results and Discussion

All results are 10-fold stratified cross validation accuracy figures in percentage (%).

Numeric Data	ZeroR	1R	1NN	5NN	NB	MLP	SVM	MyNB
No feature selection	65.1042	70.8333	67.8385	74.4792	75.1302	75.3906	76.3021	
CFS	65.1042	70.8333	69.0104	74.4792	76.3021	75.7813	76.6927	

Nominal Data	DT unpruned	DT pruned	MyDT	Bagg	Boost	RF
No feature selection	75	75.3906		74.8698	76.1719	73.1771
CFS	79.4271	79.4271		78.5156	78.6458	78.9063

J48 unpruned tree

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a = high
| c = high
| | e = high: yes (82.0/31.0)
| | e = low: no (50.0/21.0)
| c = low: no (29.0/4.0)
a = low
| c = high
| | b = high
| | | e = high
| | | | d = high: yes (7.0/3.0)
| | | | d = low: no (28.0/4.0)
| | | e = low: no (43.0/4.0)
| | b = low: no (48.0/2.0)
| c = low: no (66.0)
a = very high
| b = high
| | c = high: yes (103.0/16.0)
| | c = low
| | | e = high: yes (12.0/3.0)
| | | e = low: no (4.0/1.0)
| b = low: no (3.0/1.0)
a = medium
| e = high
| | c = high
| | | d = high: yes (37.0/10.0)
| | | d = low: no (80.0/33.0)
| | c = low: no (30.0/3.0)
| e = low: no (146.0/17.0)

J48 pruned tree

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a = high

| c = high

| | e = high: yes (82.0/31.0)

| | e = low: no (50.0/21.0)

| c = low: no (29.0/4.0)

a = low: no (192.0/14.0)

a = very high: yes (122.0/24.0)

a = medium

| e = high

| | c = high

| | | d = high: yes (37.0/10.0)

| | | d = low: no (80.0/33.0)

| | c = low: no (30.0/3.0)

| e = low: no (146.0/17.0)

4. Conclusion

5. Reflection