

Feature Descriptor: LBP

1. Feature Selection: CFS

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.646	0.618	0.618	0.617	0.618	0.618	0
J48 binary tree	0.766	0.718	0.718	0.721	0.721	0.717	0
AODE	0.861	0.809	0.809	0.809	0.809	0.809	0
Bayes network	0.878	0.809	0.808	0.809	0.809	0.809	0
Naïve bay	0.867	0.817	0.817	0.816	0.817	0.817	0
SVM	0.516	0.534	0.534	0.497	0.755	0.388	0
Logistic	0.676	0.626	0.626	0.627	0.627	0.626	0
SMO	0.702	0.702	0.701	0.702	0.702	0.702	0
Muti layer	0.778	0.695	0.695	0.696	0.696	0.695	16.19

2. Feature Selection: Chi-Square

K=10

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.577	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.631	0.626	0.626	0.624	0.626	0.626	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.14
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.481	0.269	0.355	0.22
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.5340.535	0.534	0.534	0.06
Muti layer							

K=20

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.577	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.631	0.626	0.626	0.624	0.626	0.626	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.14
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.481	0.269	0.355	0.13
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.19
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.06
Muti layer							

K=30

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.577	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.631	0.626	0.626	0.624	0.626	0.626	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.14
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.481	0.269	0.355	0.22
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.06
Muti layer							

K=40

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.577	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.631	0.626	0.626	0.624	0.626	0.626	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.14
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.481	0.269	0.355	0.22
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.06
Muti layer							

K=50

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.577	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.631	0.626	0.626	0.624	0.626	0.626	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.14
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.481	0.269	0.355	0.22
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.06
Muti layer							

K=60

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.577	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.631	0.626	0.626	0.624	0.626	0.626	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.14
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.481	0.269	0.355	0.22
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.06
Muti layer							

3. Feature Selection: Gain Ratio

K=10

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.578	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.595	0.603	0.603	0.602	0.603	0.603	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.16
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.14
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.11
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.07
Muti layer							

K=20

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.578	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.595	0.603	0.603	0.602	0.603	0.603	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.16
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.14
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.11
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.07
Muti layer							

K=30

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.578	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.595	0.603	0.603	0.602	0.603	0.603	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.16
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.12
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.2
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.07
Muti layer							

K=40

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.578	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.595	0.603	0.603	0.602	0.603	0.603	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.16
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.14
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.11
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.07
Muti layer							

K=50

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.578	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.595	0.603	0.603	0.602	0.603	0.603	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.16
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.12
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.2
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.07
Muti layer							

K=60

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.578	0.565	0.565	0.561	0.564	0.564	0
J48 binary tree	0.595	0.603	0.603	0.602	0.603	0.603	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.18
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.13
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.32
SMO	0.534	0.534	0.534	0.535	0.534	0.534	0.07
Muti layer							

4. Feature Selection: Information Gain

K=10

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.567	0.557	0.557	0.554	0.556	0.556	0
J48 binary tree	0.611	0.611	0.611	0.608	0.61	0.61	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.18
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.01
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.06
Muti layer							

K=20

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.567	0.557	0.557	0.554	0.556	0.556	0
J48 binary tree	0.611	0.611	0.611	0.608	0.61	0.61	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.18
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.01
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.06
Muti layer							

K=30

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.567	0.557	0.557	0.554	0.556	0.556	0
J48 binary tree	0.611	0.611	0.611	0.608	0.61	0.61	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.18
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.01
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.06
Muti layer							

K=40

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.567	0.557	0.557	0.554	0.556	0.556	0
J48 binary tree	0.611	0.611	0.611	0.608	0.61	0.61	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.18
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.01
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.06
Muti layer							

K=50

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.567	0.557	0.557	0.554	0.556	0.556	0
J48 binary tree	0.611	0.611	0.611	0.608	0.61	0.61	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.18
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.01
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.12
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.06
Muti layer							

K=60

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
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J48	0.567	0.557	0.557	0.554	0.556	0.556	0
J48 binary tree	0.611	0.611	0.611	0.608	0.61	0.61	0
AODE	0.621	0.611	0.611	0.612	0.612	0.611	0.18
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.14
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.34
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.06
Muti layer							

5. Feature Selection: Relief

K=10

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.562	0.557	0.557	0.552	0.556	0.556	0
J48 binary tree	0.584	0.55	0.55	0.547	0.549	0.549	0
AODE							0.23
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.34
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.22
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.05
Muti layer							

K=20

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.562	0.557	0.557	0.552	0.556	0.556	0
J48 binary tree	0.584	0.55	0.55	0.547	0.549	0.549	0
AODE							
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.34
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.22
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.05
Muti layer							

K=30

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.562	0.557	0.557	0.552	0.556	0.556	0
J48 binary tree	0.584	0.55	0.55	0.547	0.549	0.549	0
AODE							
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.34
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.22
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.05
Muti layer							

K=40

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.562	0.557	0.557	0.552	0.556	0.556	0
J48 binary tree	0.584	0.55	0.55	0.547	0.549	0.549	0
AODE							
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.34
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.22
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.05
Muti layer							

K=50

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
J48	0.562	0.557	0.557	0.552	0.556	0.556	0
J48 binary tree	0.584	0.55	0.55	0.547	0.549	0.549	0
AODE							
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.34
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.22
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.05
Muti layer							

K=60

Algorithm	AUC	AC	SN	SP	PR	FM	TIME
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J48	0.562	0.557	0.557	0.552	0.556	0.556	0
J48 binary tree	0.584	0.55	0.55	0.547	0.549	0.549	0
AODE							
Bayes network	0.607	0.573	0.573	0.575	0.575	0.572	0
Naïve bay	0.601	0.58	0.58	0.582	0.582	0.58	0
SVM	0.5	0.519	0.519	0.491	0.269	0.355	0.17
Logistic	0.579	0.565	0.565	0.564	0.565	0.565	3.22
SMO	0.534	0.534	0.534	0.534	0.535	0.534	0.05
Muti layer							