

APPENDICES

APPENDIX A.1 Logistic Classifier Result in WEKA

Stratified cross-validation

Correctly Classified Instances	163	81.9095 %
Incorrectly Classified Instances	36	18.0905 %
Kappa statistic	0.6773	
Mean absolute error	0.0715	
Root mean squared error	0.2638	
Relative absolute error	32.5977 %	
Root relative squared error	80.1746 %	
Total Number of Instances	199	

Detailed Accuracy By Class

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0,600	0,031	0,333	0,600	0,429	0,429	0,795	0,217	verylow
0,385	0,038	0,417	0,385	0,400	0,360	0,903	0,438	low
0,704	0,064	0,633	0,704	0,667	0,612	0,950	0,718	average
0,891	0,100	0,943	0,891	0,916	0,776	0,969	0,979	high
0,840	0,029	0,808	0,840	0,824	0,798	0,982	0,861	veryhigh

Confusion Matrix

a	b	c	d	e	<-- classified as
3	2	0	0	0	a = verylow
5	5	3	0	0	b = low
1	4	19	3	0	c = average
0	1	8	115	5	d = high
0	0	0	4	21	e = veryhigh

APPENDIX A.2 SMO Classifier Result in WEKA

Stratified cross-validation

Correctly Classified Instances	162	81.407 %
Incorrectly Classified Instances	37	18.593 %
Kappa statistic	0.5972	
Mean absolute error	0.2476	
Root mean squared error	0.3281	
Relative absolute error	112.974 %	
Root relative squared error	99.7003 %	
Total Number of Instances	199	

Detailed Accuracy By Class

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0,000	0,000	?	0,000	?	?	0,968	0,287	verylow
0,923	0,032	0,667	0,923	0,774	0,767	0,982	0,659	low
0,444	0,006	0,923	0,444	0,600	0,608	0,879	0,560	average
1,000	0,429	0,811	1,000	0,896	0,681	0,786	0,811	high
0,360	0,000	1,000	0,360	0,529	0,574	0,890	0,548	veryhigh

Confusion Matrix

a	b	c	d	e	<-- classified as
0	5	0	0	0	a = verylow
0	12	1	0	0	b = low
0	1	12	14	0	c = average
0	0	0	129	0	d = high
0	0	0	16	9	e = veryhigh

APPENDIX A.3: NBTree Classifier Result in WEKA

Stratified cross-validation

Correctly Classified Instances	165	82.9146 %
Incorrectly Classified Instances	34	17.0854 %
Kappa statistic	0.6772	
Mean absolute error	0.1144	
Root mean squared error	0.2359	
Relative absolute error	52.1987 %	
Root relative squared error	71.6838 %	
Total Number of Instances	199	

Detailed Accuracy By Class

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0,000	0,000	?	0,000	?	?	0,799	0,172	verylow
0,692	0,048	0,500	0,692	0,581	0,555	0,903	0,449	low
0,593	0,058	0,615	0,593	0,604	0,543	0,918	0,561	average
0,938	0,171	0,910	0,938	0,924	0,777	0,922	0,950	high
0,760	0,017	0,864	0,760	0,809	0,785	0,918	0,830	veryhigh

Confusion Matrix

a	b	c	d	e	<-- classified as
0	5	0	0	0	a = verylow
0	9	4	0	0	b = low
0	4	16	7	0	c = average
0	0	5	121	3	d = high
0	0	1	5	19	e = veryhigh

APPENDIX A.4: Naive Bayes Classifier Result in WEKA

Stratified cross-validation

Correctly Classified Instances	158	79.397 %
Incorrectly Classified Instances	41	20.603 %
Kappa statistic	0.6269	
Mean absolute error	0.0932	
Root mean squared error	0.2494	
Relative absolute error	42.5184 %	
Root relative squared error	75.7919 %	
Total Number of Instances	199	

Detailed Accuracy By Class

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0,600	0,015	0,500	0,600	0,545	0,535	0,934	0,441	verylow
0,615	0,032	0,571	0,615	0,593	0,563	0,969	0,564	low
0,481	0,064	0,542	0,481	0,510	0,439	0,906	0,593	average
0,868	0,186	0,896	0,868	0,882	0,674	0,911	0,942	high
0,880	0,046	0,733	0,880	0,800	0,773	0,978	0,914	veryhigh

Confusion Matrix

a	b	c	d	e	<-- classified as
3	2	0	0	0	a = verylow
3	8	2	0	0	b = low
0	4	13	10	0	c = average
0	0	9	112	8	d = high
0	0	0	3	22	e = veryhigh

APPENDIX 5: BayesNet Classifier Result in WEKA

Stratified cross-validation

Correctly Classified Instances	155	77.8894 %
Incorrectly Classified Instances	44	22.1106 %
Kappa statistic	0.587	
Mean absolute error	0.1042	
Root mean squared error	0.2541	
Relative absolute error	47.5213 %	
Root relative squared error	77.2192 %	
Total Number of Instances	199	

Detailed Accuracy By Class

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0,000	0,010	0,000	0,000	0,000	-0,016	0,935	0,201	verylow
0,692	0,043	0,529	0,692	0,600	0,574	0,965	0,492	low
0,481	0,058	0,565	0,481	0,520	0,453	0,905	0,644	average
0,884	0,243	0,870	0,884	0,877	0,645	0,904	0,937	high
0,760	0,040	0,731	0,760	0,745	0,708	0,950	0,824	veryhigh

Confusion Matrix

a	b	c	d	e	<-- classified as
0	5	0	0	0	a = verylow
2	9	2	0	0	b = low
0	3	13	11	0	c = average
0	0	8	114	7	d = high
0	0	0	6	19	e = veryhigh

APPENDIX A.6: Decision Table Classifier Result in WEKA

Stratified cross-validation

Correctly Classified Instances	156	78.392 %
Incorrectly Classified Instances	43	21.608 %
Kappa statistic	0.583	
Mean absolute error	0.1649	
Root mean squared error	0.2656	
Relative absolute error	75.2292 %	
Root relative squared error	80.6978 %	
Total Number of Instances	199	

Detailed Accuracy By Class

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0,200	0,052	0,091	0,200	0,125	0,102	0,921	0,226	verylow
0,538	0,038	0,500	0,538	0,519	0,484	0,922	0,425	low
0,481	0,029	0,722	0,481	0,578	0,540	0,884	0,529	average
0,922	0,286	0,856	0,922	0,888	0,663	0,860	0,884	high
0,640	0,006	0,941	0,640	0,762	0,752	0,861	0,741	veryhigh

Confusion Matrix

a	b	c	d	e	<-- classified as
1	4	0	0	0	a = verylow
4	7	0	2	0	b = low
2	3	13	9	0	c = average
4	0	5	119	1	d = high
0	0	0	9	16	e = veryhigh

