

Short report for different threshold in classification

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I tried the different threshold from 0.02 to 0.1(step 0.02) to run classification models.

The results of 0.08 and 0.1 are almost same as the 0.06 one.

The model performance is not good overall. The opening classification problem(to classify if the opening number is greater than closing number) is not bad.

Threshold level at 0.02.

To classify if the expanding number is greater than contracting number by 2%

	accuracy with change features	f1 with change features	accuracy with rate of change features	f1 with rate of change features
svm	0.620	0.680672	0.615	0.672340
rfc	0.715	0.813115	0.655	0.757895
xgb	0.740	0.821918	0.705	0.794425

To classify if the opening number is greater than closing number by 2%

	accuracy with change features	f1 with change features	accuracy with rate of change features	f1 with rate of change features
svm	0.890	0.941799	0.890	0.941799
rfc	0.885	0.938992	0.875	0.933333
xgb	0.875	0.932976	0.890	0.941799

To classify if the total expanding number is greater than total contracting number by 2%

	accuracy with change features	f1 with change features	accuracy with rate of change features	f1 with rate of change features
svm	0.77	0.870056	0.74	0.833333
rfc	0.79	0.873494	0.75	0.847561
xgb	0.75	0.846626	0.74	0.825503

Threshold level 0.04

To classify if the expanding number is greater than contracting number by 4%

	accuracy with change features	f1 with change features	accuracy with rate of change features	f1 with rate of change features
svm	0.620	0.680672	0.615	0.672340
rfc	0.695	0.798680	0.690	0.803797
xgb	0.740	0.821918	0.705	0.794425

To classify if the opening number is greater than closing number by 4%

	accuracy with change features	f1 with change features	accuracy with rate of change features	f1 with rate of change features
svm	0.890	0.941799	0.890	0.941799
rfc	0.890	0.941799	0.885	0.938667
xgb	0.875	0.932976	0.890	0.941799

To classify if the total expanding number is greater than total contracting number by 4%

	accuracy with change features	f1 with change features	accuracy with rate of change features	f1 with rate of change features
svm	0.770	0.870056	0.74	0.833333
rfc	0.785	0.875362	0.69	0.796053
xgb	0.750	0.846626	0.74	0.825503

Threshold level 0.06

To classify if the expanding number is greater than contracting number by 6%

	accuracy with change features	f1 with change features	accuracy with rate of change features	f1 with rate of change features
svm	0.62	0.680672	0.615	0.672340
rfc	0.69	0.796053	0.625	0.710425
xgb	0.74	0.821918	0.705	0.794425

To classify if the opening number is greater than closing number by 6%

	accuracy with change features	f1 with change features	accuracy with rate of change features	f1 with rate of change features
svm	0.890	0.941799	0.890	0.941799
rfc	0.885	0.938992	0.895	0.943700
xgb	0.875	0.932976	0.890	0.941799

To classify if the total expanding number is greater than total contracting number by 6%

	accuracy with change features	f1 with change features	accuracy with rate of change features	f1 with rate of change features
svm	0.77	0.870056	0.740	0.833333
rfc	0.72	0.818182	0.625	0.731183
xgb	0.75	0.846626	0.740	0.825503