

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	0.880	0.936170	0.845	0.915068
rfc	0.865	0.927614	0.870	0.926966
xgb	0.905	0.947945	0.905	0.947945

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	0.95	0.974359	0.950	0.974359
rfc	0.95	0.974359	0.925	0.961039
xgb	0.95	0.974359	0.940	0.969072

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	0.88	0.936170	0.88	0.936170
rfc	0.88	0.936170	0.85	0.917127
xgb	0.86	0.923913	0.85	0.917127

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	0.655	0.762887	0.730	0.823529
rfc	0.805	0.882175	0.770	0.858025
xgb	0.770	0.848684	0.725	0.822006

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	0.900	0.947368	0.905	0.950131
rfc	0.905	0.950131	0.905	0.950131
xgb	0.900	0.947368	0.895	0.944591

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	0.800	0.888889	0.795	0.876133
rfc	0.770	0.854430	0.825	0.900850
xgb	0.795	0.879765	0.780	0.865854

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	0.610	0.628571	0.595	0.612440
rfc	0.650	0.726562	0.515	0.557078
xgb	0.655	0.747253	0.640	0.714286

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	0.865	0.927614	0.865	0.927614
rfc	0.870	0.930481	0.850	0.918919
xgb	0.845	0.915068	0.860	0.924324

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	0.675	0.754717	0.625	0.688797
rfc	0.650	0.755245	0.665	0.758123
xgb	0.695	0.779783	0.635	0.724528