

for author identification (F) was higher by 2.34% than the previous method (E) before applying co-author network.

Table 4 shows the results of author disambiguation using the proposed method with the total data sets which were divided into three test sets (one third data was allocated to each set).

Table 4. Result from proposed method for author disambiguation

	Precision	Recall	F1 measure
1-fold	94.00%	94.12%	94.06%
2-fold	95.40%	95.43%	95.41%
3-fold	94.93%	94.86%	94.89%
Average	94.78%	94.80%	94.79%

5 Conclusion

In this paper, using SVM features was suggested as means of identifying authors with the same name in scholarly data and analyzed the results. Expanding the co-author information, which has been known to the most effective feature, it suggested and built co-author network feature model. And SVM was tested with the combination of author-related four features (e-mail, affiliation, major, and keyword) with co-author network and its results were compared. The results of the test showed that when those features were all combined to the co-author network, the performance of author identification turned out to be 94.79 % (F), which was the highest. It indicates that this study has overcome the limitation of insufficient information of scholarly data and yielded an effective way to author by expensing co-author network.

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