Abstract

In the modern business landscape, new business institutions are constantly emerging to meet the demands of the free market. However, the mere founding of a business does not necessarily mean that it will be successful among the general populace. A business that appears to be good idea, might in fact not be a good idea at all. So, to be able to appropriately predict the chance of success of a particular business, predictive data analysis and machine learning algorithms can be used to accomplish this task. So to predict the approximate success of a business, recommendations will be used. These recommendations will be generated by applying machine learning to a particular set of data. In this case, openly available yelp data
that is set to perform all machine learning tasks will be used. Recommendation generation will also be done using both collaborative and content-based filtering. In this case, two different algorithms will be used, the k-nn nearest neighbor algorithm and dimensionality reduction through single value decomposition.

References

- Jonathan Herlocker, "Evaluating collaborative filtering recommender systems", 2004
- S. Funk, "Netflix Update: Try This at Home", Dec. 2006; http://sifter.org/~simon/journal/20061211.html
- Carlos Cobos, Orlando Rodriguez, Jarvein Rivera, John Betancourt, Martha Mendoza, Elizabeth Leon, Enrique Herrera-Viedma. "A hybrid system of pedagogical pattern recommendations based on singular value decomposition and variable data attributes.

Index Terms

Computer Science Information Sciences
Keywords
Machine Learning  Problem Solving