Yelp Recommendations

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Abstract

When looking for somewhere to eat, people often read online reviews of restaurants they have not visited themselves. One of the most common websites that aggregates user reviews is `http://www.yelp.com`*. Using machine learning techniques, we aimed make this process simpler by giving users specific restaurant recommendations, replacing their time spent looking through many possible places to eat, turning down many or most of them, with a small subset of restaurants the user is likely to enjoy based on the reviews of similar users.*

1. Introduction

1.1. The Problem

`http://www.yelp.com` is a popular destination for people looking to find out what other people think of restaurants, coffee shops, and other food establishments in their area. Often people make decisions on where to eat based on the reviews other yelp members give to restaurants they're considering. While this is more useful than having no information about the restaurant at all, someone looking for a recommendation is bound to the opinions of strangers, who perhaps have very different tastes in food.

1.2. The Solution

Our solution is to fix this problem by giving a person personalized recommendations. Based on the person's past reviews, we aim to find a subset of *Yelp* users with similar taste and guess the scores that the given person would give to restaurants he or she has not yet visited. This allows the person to try a new restaurant with a greater sense of security that he or she will enjoy the experience and not waste money. [1]

2. Algorithm Overivew

2.1. The Pipeline

Our pipeline takes in a user, and outputs a restaurant recommendation. In order to do this

2.2. Similar Users

Our solution creates a

References

[1] A. Alpher. Frobnication. *Journal of Foo*, 12(1):234–778, 2002.