

Big Data Analysis in Hotel Customer Response and Evaluation based on Cloud

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Abstract—Traveling has always been a popular way of relaxation. With the ongoing stress caused by work and daily labors, the need of reducing stress via traveling has grown immensely, making trips a major part of human life. The core of traveling is to relax not only the body, but also the soul. However, there are so many information scattered around the internet, making it very hard to pin point the perfect hotel. This paper provides a solution based on cloud computing combined with big data. By gathering and sorting the information on the web, then analyzing and ranking the results, they can be shown in a way that is easy to read and understand. The research started with the implementation of a cloud server and installing software, then gather information on the internet for processing, the next step is programming the code for cloud computation, and at last, design the web UI for data presentation. At first, the cloud server is equipped with Hadoop for distributed computing. After installation, WebCrawler is used to gather information and review from the internet, then using neural network and unsupervised learning to teach the server how to break down the reviews. Through analyzing these results to understand the emotions behind the sentences, transforming it into data for Hadoop to do distributed computing. Lastly, using K-means algorithm to sort all the data, and updating the database every day. This solution combines a lot of popular technologies, sorting the cluttered reviews of hotels on the internet, making them easier to read and understand. Allowing travelers to easily pick out the perfect hotel for their needs.

Keyword—WebCrawler, Neural-Network, K-means, Lexical Emotional Evaluation, Unsupervised Learning.



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