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Usage of machine learning based recommendation system in the development of web-service

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Abstract

The article is about Recommendation Systems that are used to help users find items or services, such as books, music, electronics or based on information about the user, or the recommended item. RS systems also play a major role in the process of making decisions that potentially helping users to maximize profits or minimize risks in choosing items [1].

Keywords: Recommendation system, Machine Learning, Filtering

1 Introduction

The existing recommendation methods mainly include collaborative filtering recommendation, knowledge-based recommendation, content-based recommendation, and so on. Each recommendation method has its own advantages and disadvantages. The disadvantages of content-based recommendation methods mainly include low automation level and poor diversity of recommendation results. Collaborative filtering approach depends on a large amount of historical data sets. Knowledge-based recommendation is a static method, whose main difficulty is knowledge modeling. But recently these systems have been using machine learning algorithms from the field of artificial intelligence.

2 Essential Information

The problem is that Machine learning field does not have a clear classification scheme for its algorithms, mainly because of the number of approaches and the variations. It becomes difficult and confusing to choose an appropriate machine learning algorithm that fits one's need when developing a web service with Recommendation system module [2].

3 Example of usage

According to the survey, choosing a suitable machine learning algorithm for a recommender system is difficult because of the great number of algorithms described already existing in the field of Machine Learning. For example, an online techshop may use a machine learning algorithm to classify laptops by weight and then recommend other laptops to a user buying a specific one.

4 Conclusion

Machine learning has become very popular these days due to incensement in processor speed and memory size. As a consequence, the Machine learning field now has a large number of algorithms that use mathematical or statistical analysis to learn, draw conclusions or infer data [3].

References

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