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Trading Recommendations System for Non-fungible Tokens

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TABLE OF CONTENTS

List of Figures i

List of Tables i

1 Introduction 1

2 Literature Review 2

2.1 Chapter Overview 2

2.2 Problem Domain 2

2.3 Concept Map 2

2.4 Existing work 2

2.4.1 Benchmarking 2

2.5 Review of Different Problem-solving Approaches 2

2.6 Review of Evaluation Approaches 2

2.7 Tools 2

2.8 Chapter Summary 2

References I

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1: INTRODUCTION

CHAPTER 2: LITERATURE REVIEW

2.1 Chapter Overview

2.2 Problem Domain

2.3 Concept Map

2.4 Existing work

A hybrid Recommendations System (Cheng and Lin, 2020) which utilizes opinion & sentiment extraction techniques from user reviews to create preference profiles for movie recommendations, to enhance the quality of recommendations regardless of the rich or sparse nature of the dataset has been identified as one of the recent researches done towards pushing the limits of baseline recommendation models. The framework that has been designed here uses Collaborative Filtering as the base Recommendations model. The contribution of this research is applicable to the feature engineering stage of the system.

Sentiment analysis is applied on user-reviews to detect user-opinions about movies that were watched and reviewed by users. This data is used to create a user's preference profile, similar to what's created in Content-based filtering. The user's sentiment is identified as a step beyond traditional preference ratings.

Due to its capability of dealing with insufficient data, the framework is able to produce recommendations that are more accurate and efficient than existing baseline methods. This proves that using public opinion in the feature engineering stage can enhance the quality of recommendations.

Due to the fact that the semantic strategy of opinion extraction being generic, it is understood that it may not be ideal to identify different aspects in varied genres. Examples mentioned are, quality of sound may be of greater interest in action movies, while the story-line in dramas. Slang, irony & sarcasm haven't been taken into consideration when extracting user opinion. A major limitation identified in most systems that rely on similar opinion mining systems is that they are very dependant on the text mining technique used. Furthermore, the semantic strategy of extracting user opinion is identified as future work that can be done with regarding to this framework.

2.4.1 Benchmarking

2.5 Review of Different Problem-solving Approaches

There are several baseline techniques of Recommendations Systems that have been used by the biggest data-driven companies around the world.

2.6 Review of Evaluation Approaches

2.7 Tools

2.8 Chapter Summary

REFERENCES

Cheng, Li Chen and Ming-Chan Lin (Oct. 2020). “A hybrid recommender system for the mining of consumer preferences from their reviews”. In: *Journal of Information Science* 46.5, pp. 664–682. ISSN: 0165-5515, 1741-6485. DOI: 10.1177/0165551519849510. URL: <http://journals.sagepub.com/doi/10.1177/0165551519849510> (visited on 07/16/2021).