

Personalized Video Game Recommendation Engine

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ABSTRACT

In the rapidly expanding universe of video gaming, finding titles that resonate with individual tastes can be overwhelming. Our team has developed a compact yet powerful Video Game Recommendation Engine tailored to streamline this discovery process.



MOTIVATION

The GoodGame Recommendation
System offers personalized game
suggestions in a market flooded by
indie titles and mobile platforms,
making game discovery simpler for
both avid gamers and non-gamers
looking for the perfect gift or
personal entertainment.

OBJECTIVES

- Enhance user experience by providing personalized content.
- Increase engagement by suggesting relevant options.
- Boost user retention through tailored recommendations.
- Optimize content delivery based on user preferences and behavior.

METHODS

1. COLLABORATIVE FILTERING **Pros:**

- Offers personalized recommendations
- Can provide highly relevant suggestions
- Doesn't require content analysis.

Cons:

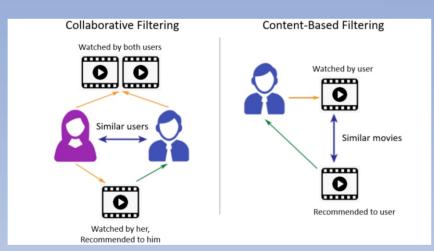
- Struggles to recommend items to new users.
- The user-item interaction matrix can become very sparse.

2. CONTENT-BASED FILTERING **Pros**:

- No Cold Start for Items.
- Transparency.
- User Independence.

Cons:

- Cold Start for Users.
- Feature Extraction Complexity.



3. HYBRID FILTERING

Pros:

- Improved Accuracy.
- Reduced Cold Start Problem.
- Increased Diversity.

Cons:

- Complexity.
- Computational Cost.

Prediction (like/do not like) User's Model performance User's Model performance Prediction (like/do not like) Prediction Recommendation ranked list RECOMMENDATION SUPERVISOR

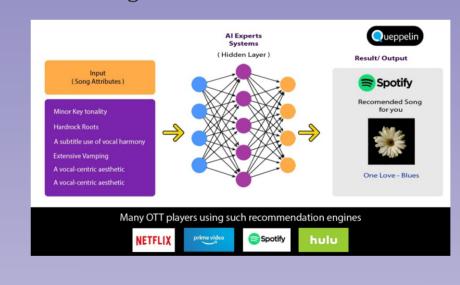
4. NEURAL NETWORK

Pros:

- Complex Pattern Recognition.
- Feature Learning.

Cons:

- Data Hungry.
- Overfitting.

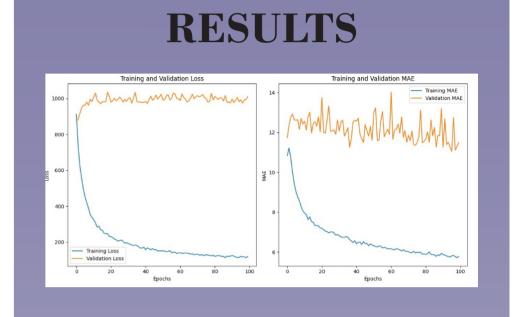


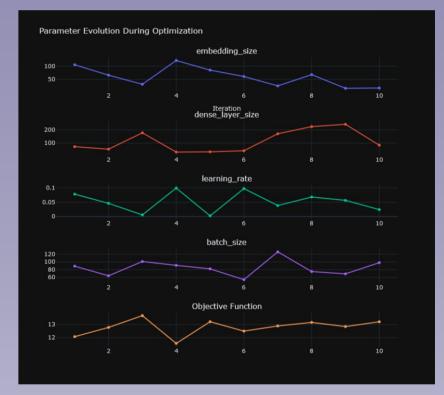
5. SCORING

- Weighted Scoring.
- Heuristic Approaches
- User Profile Matching.

6. RE-RANKING

- Diversity Enhancement.
- Multi-Criteria Sorting.
- Personalization Algorithms.





CONCLUSION

