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NFT-RecSys

A Trading Recommendations System for Non-fungible Tokens

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ABSTRACT

Non-fungible Token (NFT)s allow people to trace the origin of digital items and with the help of Blockchain technology. Since the items are unique from each other, as expressed by the name itself, they are *not fungible*. One NFT is expected to be unique from another. Due to several restraints that are presented with the nature of NFTs & the overwhelming amount of data that needs to be analyzed, it is difficult to find NFTs of comparable value that is trending among the community, timely and relevant to each user's identified interests or the NFT that the user currently owns.

Recommendations Systems have been identified to be one of the integral elements of driving sales in e-commerce sites. The utilization of opinion mining data extracted from trends have been attempted to improve the recommendations that can be provided by baseline methods in this research, to address the restraints presented by NFTs.

NFT-RecSys presents ensembled Recommendations techniques to produce trending recommendations of NFT assets, while preserving user-anonymity. The data extraction methods explored for recommending NFTs, exploration of features that can be used for recommendations & the integration of social-trends into recommendations are novel results yielded by this research.

Keywords: Recommendation Systems, Hybrid Recommendation Systems, Machine Learning, Non-fungible Tokens, Data Science, Opinion Mining

Subject Descriptors:

- Information systems → Information retrieval → Retrieval tasks and goals → Recommender systems
- Human-centered computing → Collaborative and social computing → Collaborative and social computing theory, concepts and paradigms → Social recommendation
- Information systems → Information systems applications → Data mining
- Applied computing → Electronic commerce → Online shopping
- Computing methodologies → Machine learning → Machine learning algorithms → Ensemble methods