Exploring the Efficiency of Hybrid Recommender Systems Implemented with TensorFlow Framework

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Abstract: *In recent years, the field of recommendation systems has seen significant advancement with the introduction of hybrid approaches. These systems combine the strengths of multiple recommendation techniques to provide more accurate and diverse recommendations to users. In this research, we propose and evaluate the effectiveness of a hybrid recommender system that utilizes TensorFlow, an open-source machine learning framework, to implement the system. The proposed system combines both collaborative and content-based methods to remove the cold start problem and make personalized recommendations that can recommend similar movies to the users based on features extracted by the model. The results of our experiments demonstrate that the proposed hybrid system outperforms traditional singular methods and can be effectively implemented using TensorFlow. This research provides insights into the potential of TensorFlow for building efficient hybrid recommendation systems and the benefits of combining multiple recommendation techniques.*

Keywords: TensorFlow, Recommender System, MovieLens, Neural CF, Hybrid