Movie Recommendation System Based on User's Facial Emotions, Age and Gender Using Deep Learning

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ABSTRACT

Lot of people suffer from depression and stress situations because of busy life style and responsibilities them having. Its very import to keep their mental health good because if mental health not good people suffer. Mental health is an essential aspect of overall well-being and is critical for leading a fulfilling and productive life. Good mental health allows individuals to cope with the daily stresses and challenges of life, Movies can be a helpful for relieving stress and overcoming depression. Watching a good movie can provide an escape from daily life and can transport the viewer to a different world, allowing them to take a break from their problems. This paper proposes a movie recommendation system that utilizes deep learning techniques to provide personalized recommendations based on users' facial expressions, age, and gender. Watching movies has become a popular way for people to relieve stress and depression, and the proposed system leverages this by utilizing facial emotion recognition to identify the user's emotional state, age and gender. Additionally, the system captures photo of the user's face when they start the application according to that captured image emotion, age and gender will identify. Users can also watch movie trailers, read descriptions most importantly watch the recommended movies. The system employs convolutional neural networks to extract features from facial expressions and provide personalized movie recommendations based on the survey that author collected for gather information. The results demonstrate that the proposed system outperforms traditional recommendation systems and provides more accurate and personalized movie recommendations. This research emphasizes the importance of utilizing deep learning techniques to develop recommendation systems that cater to users' emotional states and demonstrate how movies can be an effective means of managing stress and depression.

Key Words: Machine learning, facial Emotion Recognition, CNN, Age *Recognition,*, Gender *Recognition, Movie Recommendation*

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