**Literature Review**

Movie recommendation systems aim to suggest movies to users based on their preferences and past interactions. Traditional methods include Collaborative Filtering (CF) and Content-Based Filtering (CBF). However, these methods often face challenges like the cold-start problem and scalability issues (Sensors, 2022). Long Short-Term Memory (LSTM) networks, a type of Recurrent Neural Network (RNN), are particularly effective for sequence prediction problems due to their ability to remember long-term dependencies, making them suitable for modelling user behaviour over time in recommendation systems (IJCRT, 2024). Recent studies have explored using LSTM networks to enhance movie recommendation systems. By capturing the sequential nature of movie-watching behaviour, LSTMs allow systems to predict future preferences based on historical data (AIP, 2023).

Research on movie recommender systems highlights various algorithms, including LSTM networks, and discusses performance metrics and implementation challenges (Sensors, 2022). Other studies survey state-of-the-art methods, such as deep learning approaches like LSTM, and examine their limitations and potential improvements (ElCVIA, 2020). While some papers focus on CF and CBF methods, they provide insights into integrating these approaches with LSTM networks to enhance performance (IJCRT, 2024). Despite the promising capabilities of LSTM-based movie recommendation systems, implementing them comes with challenges, such as data sparsity, scalability, and addressing the cold-start problem for new users. Future research could explore hybrid models that combine LSTM networks with traditional methods, leveraging the strengths of both approaches.

**References**

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