Stream Count Predictive Analysis for Upcoming Songs on Spotify using Machine Learning: A Systematic Literature Review

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Abstract

In the era of evolving music consumption, this systematic literature review researches the realm of predictive analytics for music streaming, specifically targeting Spotify's stream count prediction in Sri Lanka through machine learning methodologies. With streaming platforms shaping the music industry landscape, accurately predicting song popularity becomes essential for artists, producers, and industry stakeholders. This review analyzes global studies on machine learning's application in forecasting stream counts while defining their methodologies and outcomes. It intricately examines diverse machine-learning methodologies employed in prior research endeavors. Ranging from regression models and ensemble techniques to deep learning architectures, the spectrum of methodologies used in forecasting stream counts on music streaming platforms is elucidated. Noteworthy techniques such as support vector machines (SVM), random forests, and recurrent neural networks (RNNs) have demonstrated efficacy in capturing intricate patterns within music data for predictive analysis. Our paper highlights the significance of feature engineering and selection methods, underscoring their pivotal role in enhancing the accuracy of predictive models. Through this comprehensive study, this review aims to expose specific gaps in stream count prediction models tailored to Sri Lanka's varied music preferences and consumption habits. By illuminating these gaps, it aspires to stimulate future research

endeavors focused on refining predictive models, ultimately empowering the Sri Lankan music industry with more insights for better strategic decision-making.

Citation

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