

Music Recommendation using Personality Prediction with Machine Learning

MTA Deen#, WMKS Ilmini

Department of Computer Science, Faculty of Computing General Sir John Kotelawala Defence University, Sri Lanka

Abstract. Music is one of the digital era's most widely used forms of entertainment. The availability of many genres of music has substantially expanded along with the development and volume expansion of digital material. As a result, delivering the best music to listeners has become a crucial area of study in computer science. Music recommendation systems minimise human labour by automatically suggesting songs and artists based on genre, artist, instrument, and consumer opinions. Furthermore, the recommendation systems can be improved with the user's personality. Personality-based music recommendations will improve the user experience. Hence, we conducted a review study to find the limitations, technology and models used and case studies of the personality-based music recommendation system. The review study results convey that the Cold Start problem and insufficient data are some problems encountered in Music Recommendation Systems. Also, the Hybrid model can be considered ideal from several recommendation models used in recommendation systems. Various personality schemas are introduced to measure personality, and one of the famous and accepted ones is the Big-Five personality model, which describes personality based on five factors.

Keywords: *Personality Prediction, Personality, Music Recommendation, Big Five Personality Traits*