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(57) Abstract :
METHOD AND SYSTEM FOR QUANTITATIVE ANALYSIS OF MUSIC PATTERNS FOR EMOTIONAL RESPONSE PREDICTION ABSTRACT The present invention discloses a method and system 200 for quantitative analysis of music patterns to predict emotional responses. The system 200 comprises modules for data input, feature extraction, pattern analysis, emotional response prediction, user interface, and database storage. Musical input data is received and undergoes feature extraction, including tempo, pitch, rhythm, and harmony features. Utilizing pattern analysis through machine learning algorithms, emotional elements within the music are identified. A predictive model generates emotional response predictions based on the identified patterns. The user interface visually displays these predicted emotional responses, enhancing user engagement. A database stores the input data, extracted features, identified patterns, and predicted responses, supporting model refinement through user-provided feedback. By accurately assessing musical patterns and predicting emotional reactions, this invention offers valuable insights for creators, music industry professionals, and researchers, enabling the tailored composition and delivery of music to evoke desired emotional experiences.

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