ABSTRACT

Appreciating Indian Music using AI
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Hindustani classical music is a multi-faceted and ancient form of musical art that has its roots in the Indian subcontinent. The main key element in Hindustani classical music is called raga (or "raag"). A raga is a musical theme or melodic framework. It can be thought of as a scale created by choosing a specific set of notes from within an octave where different combinations of notes evoke different moods and inspire different feelings. Hindustani classical music is gaining popularity all around the world, especially in the west. Many people want to learn to sing Hindustani classical music for personal passion or interest.

However, currently, we don't have enough resources to learn Hindustani classical music because it is very complicated. Many ragas can be based on the same scale with several improvisations which are very difficult to distinguish, and there are very few musicians who have mastered it. These improvisational patterns are not even concretely defined in any format and are just passed through a fading oral mentor-student tradition.

In this project, we aim to build a music website to enable real-time recording and uploading songs that can help the user in getting immediate feedback on the musical notes they are singing. We will be using deep learning to identify ragas using audio features such as scale, pitch, tone and provide feedback and suggestions to the users. The website can be accessed from anywhere, anytime, and free of cost to encourage people to follow their musical passion.

Acknowledgments