Abstract

Raga is the central melodic concept in Indian classical music and its automatic recognition is an important research area in computational musicology. It has several applications like indexing music, comparing and classifying music, Music Information Retrieval and pedagogy of music. Musical note extraction is the first logical step in the process of creating computational models of ragas. This paper proposes a method for extracting musical notes (swaras) from audio recordings of South Indian Classical music, based on a special kind of Artificial Neural Network known as Kohonen's Self Organizing Feature Map (SOM).

References

2. Koduri, G.K., Miron M., Serra J., Serra, X. Computational approaches for the
understanding of melody in carnatic music. 12th International Society for Music Information Retrieval Conference (ISMIR 2011), Florida, USA


5. Lapp, D.R. The Physics of Music and Musical Instruments. Wright Center for Innovative Science Education, Tufts University, Medford, Massachusetts


7. Sahasrabuddhe, H.V., Upadhye, R. On the Computational Model of Raag Music of India. Workshop on AI and Music: 10th European Conference on AI, Vienna


Index Terms

Computer Science          Artificial Intelligence

Keywords
Musical Note Extraction using Self Organizing Feature Maps

Pitch Estimation, Sruthi, Swara, Raga, Octaves, Relative Pitch Ratio, Self Organizing Feature Maps.