

## Music Note Detection and Dictionary Generation from Music Sheet Using Image Processing Techniques

**Authors :** Muhammad Ammar, Talha Ali, Abdul Basit, Bakhtawar Rajput, Zobia Sohail

**Abstract :** Music note detection is an area of study for the past few years and has its own influence in music file generation from sheet music. We proposed a method to detect music notes on sheet music using basic thresholding and blob detection. Subsequently, we created a notes dictionary using a semi-supervised learning approach. After notes detection, for each test image, the new symbols are added to the dictionary. This makes the notes detection semi-automatic. The experiments are done on images from a dataset and also on the captured images. The developed approach showed almost 100% accuracy on the dataset images, whereas varying results have been seen on captured images.

**Keywords :** music note, sheet music, optical music recognition, blob detection, thresholding, dictionary generation

**Conference Title :** ICCVISIP 2021 : International Conference on Computer Vision, Image and Signal Processing

**Conference Location :** Helsinki, Finland

**Conference Dates :** July 19-20, 2021