CSE 5524 Final Project Proposal

Sheet Music Player

**Overview of the Project**

Making an application that can “read” the sheet music and play it.

We can first take a picture of any sheet music. The program will translate it into music notes and then play it.

**Problems to Solve**

Preprocessing the image and get a clean sheet music.

* Remove the camera distortion.
* Normalize the lighting

Crop the sheet music into single notes

Recognize the notes and play the music

**Computer Vision Tools Used**

Image registration to remove distortion

Edge detection to find lines and decide the window for template matching

Template matching or Shape Context to identify what the note is

**Evaluation**

We take pictures of sheet music and gather sheet music from the internet to test the program.

**Separation of Work**

* We will have one people working on the preprocessing the image.
* One people working on the lines detection and deciding window of recognition. This people will also work on playing the music from the recognized notes.
* The last people working on note recognition