CS5002 SENIOR DESIGN
FINAL SELF ASSESSMENT
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The main part of what I contributed was towards the image interpreter. This revolved around getting an image, finding the edge of the objects in the image, and converting that edge into a set of points representing each member of the marching band. I also contributed a fair amount to the design and giving feedback throughout other aspects of the project, more so towards the beginning revisions of the drill solving algorithm. I don't think that I got to apply all my skills that I identified earlier. The main skill that I didn't apply would be working to create a CI/CD pipeline/workflow for us. I feel that this was primarily as we were using python and pyQt, so we didn't have as much of a need to spend the extra time to create these pipelines. I specifically the two big aspects that I worked on was reworking the output format of the Image Interpreter two match with the input of the drill solver and researching ways to display the results in a manner helpful for further testing. I also worked on improving some bugs that were present in the image interpreter and looking at trying to improve the method that the program determines edges, specifically looking at canny edge detection versus skeletonization.

I learned a lot during this project. The most important thing that I learned was the importance of iterative development. Trying to get all the bugs out at once and being able to let other look at test your code helps fine tune our project and allowed others to have a voice on what each other were working on. Through this project we learn how to better delegate between our team for each other's strong suits and areas in the project that the members were interested in. Looking at my success, I am proud that I was able to get interpolation working for the image to point coordinates. This area was also an obstacle and there were several bugs and edge cases that I was not able to get solved before the expo. I feel that this is due to my inexperience when it comes to image interpolation and computer vision, though I did enjoy looking into this area of research.