

## Team sddec20-19 Report 5 (03/16/20 - 04/12/20)

### Summary

This period has been very chaotic as a result of the coronavirus pandemic. Apart from keeping up with the assignments for class, we haven't made much technical progress on the project. That said, we were able to show that YOLOv3 is more accurate with crowds when we split the image into sub images. Brandon was able to alter the original program to split given images into 4 equal quadrants and analyze each one to create a more accurate reading of the room. We've also collectively discussed ideas for algorithms to help with image to seating chart mapping. We haven't had any technical development, but we all have a solid idea of how we can implement a system for this. Since going online, we have been able to meet with our client and develop a plan of action for the rest of this semester, so we finish strong.

### Individual contributions

Member	Contributions	Hours	Cumulative Hours
Brandon Johnson	Algorithm Planning, Improved Object Detection Accuracy, Slides and Recording for Lightning Talk, and Reflection Assignment	6	29
Angela Shauer	Organize Drive, Attend Team Meetings, Algorithm planning, Slides and Recording for Lightning Talk, and Reflection Assignment	7	37
Lance Demers	Attend Team Meetings, Work on Design Doc, Contingency Plan, and Lightning Talk	8	28
Connor Sullivan	Work on Design doc, Slides and Recording Lightning Talk, Work on Contingency Plan Assignment, and Attend Team Meetings	7	28
Nathan Oran	Algorithm Planning, Attend Team Meetings, Algorithm planning, Slides and Recording for Lightning Talk, Contingency Plan, Reflection Assignment, and Design Doc	9	33.5

### Pending Issues:

N/A

### Plans:

So as part of the plan for the end of this semester, we've decided to spend only one more week on technical development, reserving the end of the semester for working on the presentation. The goal of the next week will be to finalize an implementation on the student detection. Brandon will be leading that development. Angela and the rest of the team will focus on developing a way to read the image output, to determine attendance based on a seating chart that we will come up with for the test image. This will give us a rudimentary, but functional starting point when we return in the fall.