CHAPTER 6
CONCLUSION

Based on the research and the test on object detection and CNN this study, it can be concluded that CNN can be configured into object detection by processing an image in sequence and classifying it with CNN. Based on the test done in this study, CNN can help to detect rotten or fresh oranges in image. The prediction boxes can't be set to be larger because the prediction boxes will go outside of the image and this will cause an error that will stop the program.

Too much training image can cause the prediction to be wrong. This happened because the CNN predicted the object background with high results.Increasing the training image resolution helps improve the accuracy if not using NMS. Too much training image can cause the prediction to be wrong. This happened because the NMS function chose the prediction boxes that overlap and have the highest score. And training too much image can cause the background of the object to be detected multiple times with a high score hence removing other prediction boxes that are on the object.

Based on the conclusion above, the author suggest the following for future work :

1. Find a way to increase prediction boxes size.
2. Increase total training image and resolution of the image.
3. Add another algorithm that can help process the data made by CNN.
4. Add another pyramid image to increase the prediction data.