CHAPTER 6 CONCLUSION

Based on research conducted on this EAST detection character project, it can be concluded that :

1. There are several steps in how EAST works to detect characters in the image, first EAST will recognize the image by means of the Image Feature Extractor Stem, at this stage the image will enter 5 x convolutional layers with different sizes, namely (16, 64, 128, 256, 384). then enter the Image Merging Branch Feature, at this stage the image will return to the convolutional layer with 3 layers, namely (128, 64, 32). After that, combine the results of the Feature Maps from the Stem Extractor Feature and the Branch Merging Feature image. Then the letter characters in the image will be recognized for the pattern and then compare the pattern with the model train. After that create a text area marker on the input image with OpenCV.

2. By adding a dataset with a variety of font image models with a variety of fonts, sizes and filtering during image processing. Then it will create a Train model that will create various kinds of letter characters in the input image.

3. From the calculation data that has been applied using accuracy formula, we get a result in the form of what percentage of the accuracy of an article that is classified by character and processed in the EAST Algorithm. The reason for using the accuracy measurement system is to compare the results obtained from my model with the EAST OCR model, so that we can determine the accuracy of the results of each model efficiently and quickly.

4.The advantage of using the EAST algorithm is that it is easy to implement for text detection because EAST is a library and has a valid tutorial at https://www.pyimagesearch.com/2018/08/20/opencv-text-detection-east-text-detector/.

Based on the conclusions described above, the following are suggestions

given by future research:

1. add a dataset with images that have varying fonts and sizes for algorithm recognition.

2. Perform image processing using edge detection filters which function to emphasize the characteristics of the image.

3. make additional steps on Epoch so that the algorithm gets a better model train

