

## CHAPTER 6

### CONCLUSION

In the last chapter, from the results of the experiments that have been carried out, the results of the model used produced such good performance. The test accuracy obtained was 95.68% from splitted data of 90% training and 10% testing. With adjusted parameters, namely batch size 32, learning rate 0.001, and epochs 25. These parameters were obtained after comparing with several experiments that have been carried out and the best results were obtained from several of these experiments. By using these best results as a benchmark for conducting further experiments for cross validation, k-fold = 5 produced an average validation accuracy of 93.24% and an average validation loss of 0.2125 while k-fold = 10 produced an average validation accuracy of 93.52% and an average validation loss of 0.1915. The greater the fold number, the more data used to evaluate the performance of model and can produce higher accuracy. From all the experiments that have been carried out, it can be concluded that the selection of parameters is an important factor to improve accuracy and produce good results.

In future research, make sure the dataset to be used in the project is more precise and the methods used can be analyzed for their strengths and weaknesses to be compared with other methods. Parameter selection must also be considered because it is one of the important factors to obtain maximum accuracy and results.