CHAPTER 6 CONCLUSION

After all of the study to build the model, and then training and testing the model along with data collecting and analysis, the project have come to it's conclusion and the very last question can be answered. Can the ResNet50 with combined feature model can reliably discern between authentic and forged image? And the answer is sadly no because as shown in the results section none of the test accuracy ever reach 0.7 or 70% the minimum accuracy to be called effective, or at least in the current form. Because there are still numbers of changes that can be made to optimize the model, for example we have not even talk about the change of parameters in the pre-processing namely Gabor filter and Chan-Vese segmentation parameters. Also, the model can learn more with higher number of epoch given on the model parameter like Kuznetsov [6], and Sudiatmika and Rahman [10] works that have 100 or even 300 epoch. Not only a better parameters can be used but also an even better input can revised from what we have as seen with 3 channels input method that was made in the late development of this project.

I truly believe, even with results that does not meet the requirement, the proposed model can work better with further optimization in term of pre-processing and it's parameter. Changing smaller detail in parameter of Gabor filter and Chan-Vese segmentation may increase the performance of the model and also trying to modify the input that revolves around image chroma might increase the performance even more, and further study should focus on the matter.

