CHAPTER 5
CONCLUSION AND RECOMMENDATION

5.1 Conclusion

In this research, we have proposed a classification framework to identify and classify the DM dataset using F-Score Feature Selection and Fuzzy SVM. F-Score feature selection shows the right expectation in data measurement process after the pre-processing step to identify the most valuable features so that it can lead to reducing the number of un-necessary features to be classified. While, Fuzzy SVM classifier also shows the effectiveness in terms of training the data to generate the Fuzzy rules, so that the proposed Fuzzy Inference can be performed optimally. The experimental result shows a quite promising result with 89.02% as an accuracy result which comparable and has potential to be enhanced in the future work.

5.2 Recommendation

This research is still currently need more further enhancement to increase the classification accuracy without sacrificing the optimum count of the generated Fuzzy rules. Refers to another relevant research, feature selection and SVM look promising in terms of producing high accuracy in classifying Diabetes dataset.

We would like to encourage other researcher to keep enhancing this approach to provide higher accuracy in the future work, which keep focus on finding the most optimum generated Fuzzy rules instead of leveraging a ton of Fuzzy rules to release single output. Some of key opportunity which can potentially quite effective to enhance the accuracy of this research is to adopting clustering technique or putting some genetic algorithm as an evolutionary algorithm approach and measure HBA1C feature which not available in Pima Indian Diabetes dataset.