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CS3120

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Midterm Homework Report

I used the SVM, logistic regression, and decision tree classifiers for this midterm assignment. For the logistic regression and decision tree, I split the dataset up into the training and testing, as required. For the SVM, I split it up into training, validation, and testing. Here are my reports:

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I would say the best classifier is between logistic regression and SVM classifiers (based on the f1-score). The decision tree has a low average f1-score, so I don’t think that could be called the best.

I would say what affects the classification performance is different classifiers. We can see that using different classifiers give us different performance reports. Another thing that may affect the classification performance is probably the size of the training data size. The larger the training data size (even with just one classifier), the more accurate the performance.