

TEXT CLASSIFICATION – LAB OUTPUT

Program 1: Basic Text Classification

Text: The movie was amazing --> Predicted Class: positive

Text: I hated the film --> Predicted Class: negative

Program 2: Probabilistic Text Classification

Accuracy: 0.87

rec.sport.baseball precision 0.90 recall 0.88 f1-score 0.89

sci.space precision 0.89 recall 0.91 f1-score 0.90

talk.politics.misc precision 0.83 recall 0.82 f1-score 0.82

Custom Predictions:

The spacecraft was launched into orbit --> sci.space

The baseball team won the championship --> rec.sport.baseball

Government policies are under debate --> talk.politics.misc

Problem 1: IMDb Movie Review Classification

Accuracy: 0.88

Positive / Negative classification successful.

Problem 2: SMS Spam Classification

Accuracy: 0.98

Spam and Ham messages classified correctly.