SMS Spam Classification — Static LIME-like Report

Dataset

Total messages: 5,572
Spam messages: 747
Ham messages: 4,825

Model

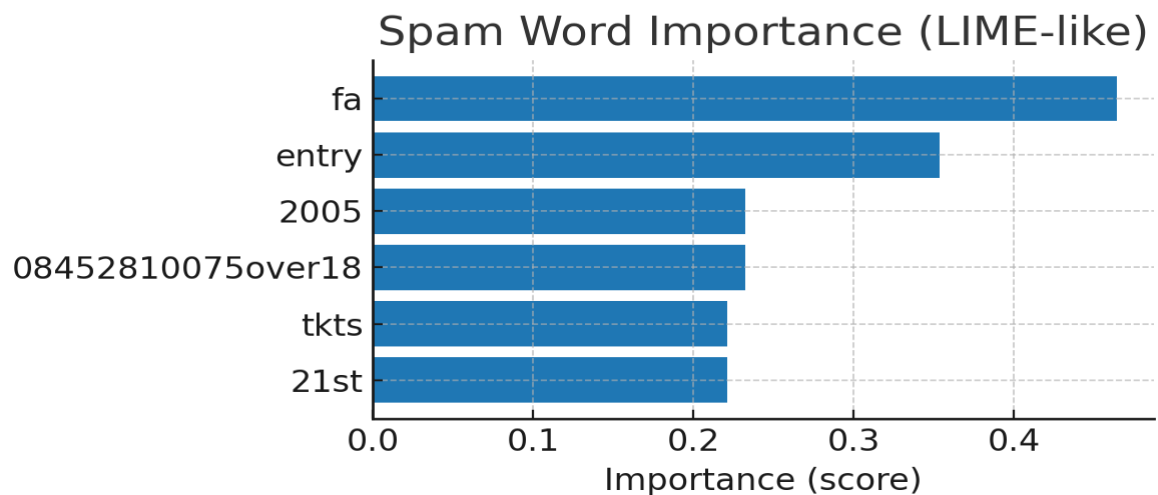Logistic Regression with TF-IDF features

Classification report

precision recall f1-score support ham 0.97 1.00 0.98 966 spam 1.00 0.80 0.89 149 accuracy 0.97 1115 macro avg 0.98 0.90 0.94 1115 weighted avg 0.97 0.97 0.97 1115

LIME-like Explanations

LIME library not available in this environment; falling back to TF-IDF per-instance feature scores to approximate important words.
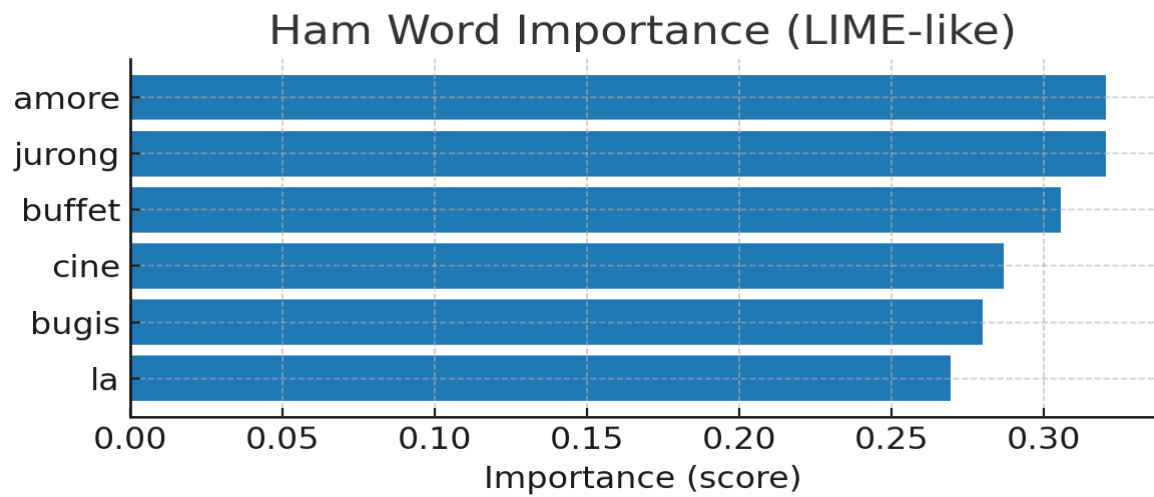
Example — Spam Message

Free entry in 2 a wkly comp to win FA Cup final tkts 21st May 2005. Text FA to 87121 to receive entry question(std txt rate)T&C;'s apply 08452810075over18's

Example — Ham Message

Go until jurong point, crazy.. Available only in bugis n great world la e buffet... Cine there got amore wat...

Ham Word Importance (LIME-like)

Top words (spam): fa, entry, 2005, 08452810075over18, tkts, 21st
Top words (ham): amore, jurong, buffet, cine, bugis, la