Evaluation of Nonparametric Classification Methods for Predicting Fake News from Article Titles

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Number of Article Titles	44,266
Number of Article Titles (True)	21,416
Number of Article Titles (Fake)	22,850
Mean Length of Titles (Words)	9.29
Median Length of Titles (Words)	9
Minimum Length of Titles (Words)	1
Maximum Length of Titles (Words)	29
Number of Features After One-Hot Encoding	18,206

Table 1: Summary of dataset used in this work. Lengths shown in this table are the texts following preprocessing.

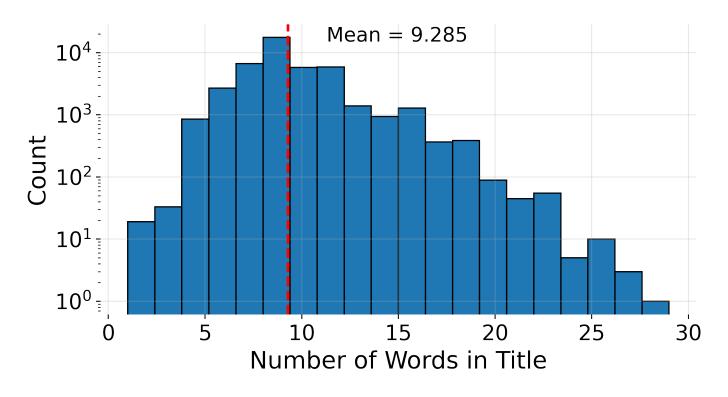


Figure 1: Histogram of length of article titles. Mean description shown with verticle red line. Y-axis is logarithmically scaled.

Method	Accuracy	auPRC	$\mathbf{F1}$	auROC	Time
Linear SVM	0.95	0.92	0.95	0.95	19752.63
Log Reg	0.95	0.92	0.95	0.95	126.59
MLP	0.94	0.90	0.93	0.94	1506.45
NB	0.80	0.71	0.82	0.80	21.52
RBF SVM	0.95	0.93	0.95	0.95	25225.82

Table 2: Baseline model results.

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