**SVM**

**Dataset [:10000]**

**Features: 10000**

| South Park  Svm:  Without other | Baseline | Unigram | Bigram | Trigram | Improvement of best model |
| --- | --- | --- | --- | --- | --- |
| Characters: 3 | 0.42 | **0.53** | 0.49 | 0.45 | 0.11 |
| Characters: 5 | 0.34 | **0.44** | 0.4 | 0.35 | 0.1 |
| Characters: 7 | 0.34 | **0.45** | 0.4 | 0.35 | 0.11 |
| Characters: 10 | 0.32 | **0.44** | 0.39 | 0.34 | 0.12 |

| Game of Thrones  Svm:  Without other | Baseline | Unigram | Bigram | Trigram | Improvement of best model |
| --- | --- | --- | --- | --- | --- |
| Characters: 3 | 0.46 | **0.52** | 0.5 | 0.46 | 0.06 |
| Characters: 5 | 0.3 | **0.38** | 0.34 | 0.31 | 0.08 |
| Characters: 7 | 0.24 | **0.3** | 0.27 | 0.24 | 0.06 |
| Characters: 10 | 0.21 | **0.26** | 0.23 | 0.22 | 0.05 |

**KNN**

**Dataset [:20000]**

**Features 20000**

| Game of Thrones  Knn:  Without other | Baseline | Unigram | Bigram | Trigram | Improvement of best model |
| --- | --- | --- | --- | --- | --- |
| Characters: 3 | 0.44 | **0.47 (K=39)** | 0.42 (K=3) | 0.37 (K=5) | 0.03 |
| Characters: 5 | 0.37 | **0.39 (K=23)** | 0.3 (K=11) | 0.37 (K=1) | 0.02 |
| Characters: 7 | 0.34 | **0.36 (K=63)** | 0.32 (K=1) | 0.35 (K=1) | 0.02 |
| Characters: 10 | 0.34 | **0.36 (K=61)** | 0.26 (K=5) | 0.33 (K=21) | 0.02 |

| Game of Thrones  Knn:  With other | Baseline | Unigram | Bigram | Trigram | Improvement of best model |
| --- | --- | --- | --- | --- | --- |
| Characters: 3 | **0.48** | 0.46 (K=61) | 0.45 (K=61) | 0.43 (K=15) | x |
| Characters: 5 | 0.33 | **0.34 (K=59)** | 0.29 (K=69) | 0.33 (K=1) | 0.01 |
| Characters: 7 | **0.27** | 0.24 (K=55) | 0.22 (K=27) | 0.24 (K=57) | x |
| Characters: 10 | **0.23** | 0.19 (K=55) | 0.18 (K=63) | 0.02 (K=67) | x |