|  |  |  |  |
| --- | --- | --- | --- |
| **Model** | **Features** | **English** | **Spanish** |
| **Extra Trees Regressor**  **A** | **Syllabes**  **Len chars**  **Len tokens**  **Consonant sum**  **Vowel sum**  **Senses** | **macro-F1: 0.75**  **Label Precision Recall F1 Support**  **--------------------------------------------------**  **0 0.77 0.83 0.80 2465**  **1 0.73 0.66 0.69 1787** | **macro-F1: 0.70**  **Label Precision Recall F1 Support**  **--------------------------------------------------**  **0 0.71 0.95 0.82 1326**  **1 0.86 0.44 0.59 907** |
| **Extra Trees Regressor**  **B** | **Syllables**  **Len chars**  **Len tokens**  **Senses** | **macro-F1: 0.73**  **Label Precision Recall F1 Support**  **--------------------------------------------------**  **0 0.74 0.85 0.79 2465**  **1 0.74 0.60 0.66 1787** | **macro-F1: 0.70**  **Label Precision Recall F1 Support**  **--------------------------------------------------**  **0 0.71 0.95 0.81 1326**  **1 0.87 0.43 0.58 907** |
| **Extra Trees Regressor**  **C** | **Syllabes**  **Len chars**  **Len tokens**  **Consonant sum**  **Vowel sum**  **Senses**  **Unigram Probabilities** | **macro-F1: 0.79**  **Label Precision Recall F1 Support**  **--------------------------------------------------**  **0 0.80 0.86 0.83 2465**  **1 0.79 0.70 0.74 1787** | **macro-F1: 0.73**  **Label Precision Recall F1 Support**  **--------------------------------------------------**  **0 0.74 0.93 0.83 1326**  **1 0.84 0.52 0.64 907** |
| Extra Trees Regressor | Syllabes  Len chars  Len tokens  Senses  Unigram Probabilities  (with or without consonant sum or vowel sum same if both not included together) |  |  |
| Extra Trees Regressor | Syllabes  Len chars  Len tokens  Consonant sum  Vowel sum  Senses  Unigram Probabilities  Stop words |  |  |
| Extra Trees Regressor  D | Syllabes  Len chars  Len tokens  Consonant sum  Vowel sum  Senses  Unigram Probabilities  Stop words  Noun Phrase | macro-F1: 0.78  Label Precision Recall F1 Support  --------------------------------------------------  0 0.80 0.84 0.82 2465  1 0.76 0.71 0.73 1787 | macro-F1: 0.74  Label Precision Recall F1 Support  --------------------------------------------------  0 0.74 0.94 0.83 1326  1 0.85 0.52 0.65 907 |
| Extra Trees Regressor | Syllabes  Len chars  Len tokens  Consonant sum  Vowel sum  Senses  Unigram Probabilities  Stop words  Noun Phrase  Synonym count |  |  |
| Extra Trees Regressor  E | Syllabes  Len chars  Len tokens  Consonant sum  Vowel sum  Senses  Unigram Probabilities  Stop words  Noun Phrase  Synonym count  Hypernym count | macro-F1: 0.78  Label Precision Recall F1 Support  --------------------------------------------------  0 0.81 0.83 0.82 2465  1 0.76 0.73 0.74 1787 | macro-F1: 0.74  Label Precision Recall F1 Support  --------------------------------------------------  0 0.74 0.94 0.83 1326  1 0.87 0.52 0.65 907 |