

Aggressive Language Detection using VGCN-BERT for Spanish Texts

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Motivation

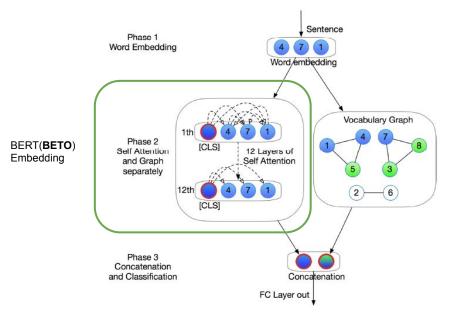




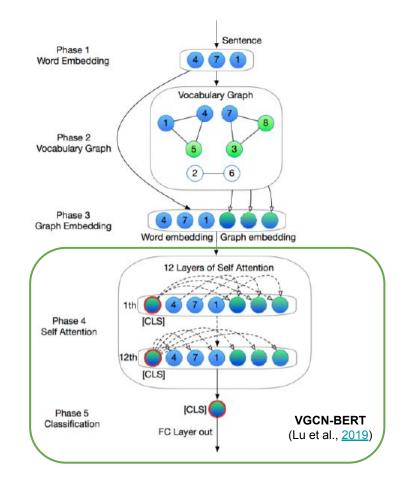
Aims

- Apply the combination of the VGCN with BERT model without any external word embeddings or knowledge for the Spanish Aggressive language detection.
- Explore and apply an improved graph representation for aggressive language detection.
- Explore and Evaluate the new pipeline using metrics suitable for this task.
- Evaluate and compare with other state-of-the-art models.

Methodology VGCN-BERT



VGCN-BERT based on (Jeon,2019) (Lu et al, 2019)



Results

Table 2. Results of the Aggressive Detection using F1-score in test set.

Model	F1 Aggressive	F1 non-agressive	F1 macro
BoW-SVM	0.6760	0.8780	0.7770
BI-GRU	0.7124	0.8841	0.7983
BETO+msg	0.7720	0.9042	0.8381
bert (multi*)	0.7809	0.9094	0.8452
bert (1 BETO)	0.7998	0.9195	0.8596
bert (20 BETOs)	0.7994	0.92.23	0.8608
VGCN-BERT *	0.8124	0.9169	0.8642

^{*} meas our developed system model.

multi* = VGCN-mBERT(multi-language BERT)



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