

Deliverable 3. BoW vs. CNN.

Compare and contrast the performance of your BoW representation and CNN. Did one model demonstrate a higher dev performance than the other? What do you see as the advantages of one model over the other that might lead to this performance difference on this data? Submit your <200 word answer to this question as a PDF on gradescope.

My CNN model (0.815) had a worse performance than the BoW representation (0.870). While BoW simply counts the frequency of each word in the file, CNN looks at words in groups or n-grams. Although the CNN model was expected to perform better since it accounted for the context of each word, because the words in this dataset were surrounded by other words with no similar meaning or context, the CNN performance ended up being worse than BoW.