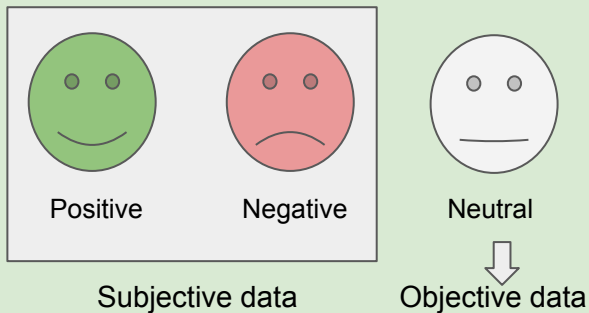


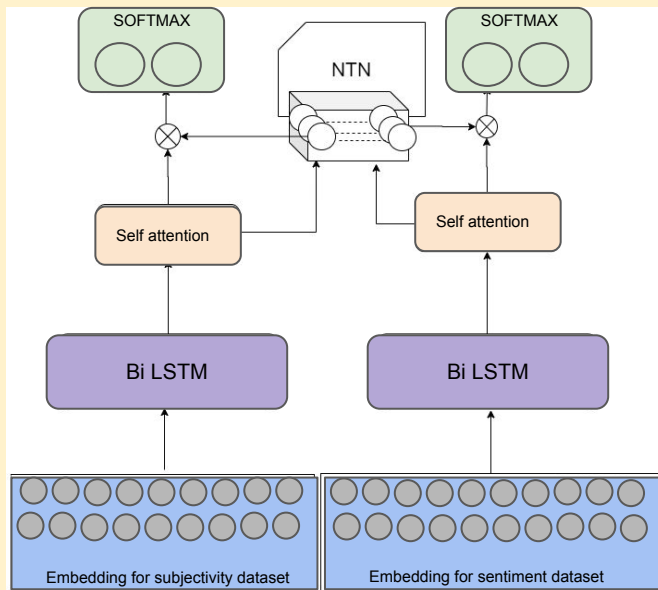
AIM

Multi-task learning is an approach to inductive transfer that improves generalization by using the domain information contained in the training signals of related tasks as an inductive bias. Our aim is to create a deep MTL framework that jointly performs polarity and subjective detection.



METHOD

The dataset was divided into train and test as 80:20 with random shuffling. We used ADAM algorithm as an optimizer with categorical cross entropy to calculate the loss. We use Neural Tensor Network model to combine both the tasks.



RESULTS

In the polarity detection case, the NTN improved the accuracy by 15% with single task framework and 10% with MTL framework whereas in subjectivity detection case, it improved the accuracy by 2-3%.

