## Paper Title:

CLCL Non-compositional Expression Detection with Contrastive Learning and Curriculum Learning

## Paper Link:

http://dx.doi.org/10.18653/v1/2023.acl-long.43

# 1 Summary

### 1.1 Motivation

As non-compositional expression is a more complex process then general language processing for natural language processing and there is not much research on this topic because of less available dataset and low learning accuracy.

#### 1.2 Contribution

This combined model of Contrastive Learning and Curriculum Learning, helps to get better accuracy from smaller datasets as non-compositional expression has limited data for training. And the model was trained with six different dataset and it always gave better results for the smaller ones. Additionally it also provides better accuracy than baseline models in every parameter.

## 1.3 Methodology

They created a framework which combines Contrastive Learning and Curriculum Learning and it was designed in a way so that it gets better results from limited datasets than larger ones. Moreover, they used six datasets and used two types of splitting techniques like random and typebase to check the models efficiency.

#### 1.4 Conclusion

Authors proposed a novel method specifically for non-compositional expression detection, including idiom usage recognition and metaphor detection. The model helps to learn easy to harder expressions and better than all the previous models to detect these non-compositional expressions.

# 2 Limitations

#### 2.1 First Limitation

Find challenging to transfer from the task of idioms usage recognition to metaphor detection

#### 2.2 Second Limitation

More advanced methods for learning the broad nature of non-compositionality, including those of idioms and those of metaphors are needed

# 3 Synthesis

For idioms usage recognition and metaphor detection, authors build a combined model which is specific for getting better accuracy from smaller datasets. This model can measure difficulty level and schedule the tasks accordingly from easy to hard.