Jul 11, 2023

* Performed hyperparameter tuning to improve accuracy. Changing the batch size from 16 to 32 significantly increased the accuracy of the PICOBert model to 44%.
* Debugged the existing models for finding performance bottlenecks.
* Upon closer inspection, found that the datasets used for finetuning and training are not harmonious instead they are based on different domains hence the reason for bad performance.
* The dataset [pubmed-rct](https://github.com/Franck-Dernoncourt/pubmed-rct) (<https://github.com/Franck-Dernoncourt/pubmed-rct>) is not annotated with PICO labels. Tried to check any online solutions but are not present.

A Solution to tackle the above problem:

* The pubmet-rct dataset is very similar to (<https://github.com/jind11/PubMed-PICO-Detection>) dataset which we are already using in the PICOBert model. This dataset needs to be processed and converted to the dataset format that BIobert is accepting, in this way both models are finetuned on the same dataset and can be compared.

Writing programming logic to convert it from this format

###28732209:

BACKGROUND|A|Student nurses in Turkey need to be exposed to appropriate undergraduate training if they are to acquire the required knowledge , attitudes and skills that will help them to fight the issue of violence against women ( VAW ) .

OBJECTIVES|A|The aim of this research study was to assess the effect of a peer education program about combating VAW on the knowledge , attitudes and skills of nursing students .

DESIGN|M|The study was designed as a randomized controlled trial .

SETTINGS|M|The participants in the intervention group received peer education on combating VAW .

PARTICIPANTS|P|@ nursing students ( intervention group : n = @ , control group : n = @ ) were included in the study .

RESULTS|R|Participants in both the intervention and control groups were assessed at pre-training and at two months post-training .

RESULTS|R|Pre-training and post-training knowledge and attitudes were significantly different in the intervention group ( p < @ ) .

RESULTS|R|Moreover , the intervention group displayed a statistically significant difference in their ability to explain the correct interventions in a case study about VAW ( p < @ ) .

CONCLUSIONS|C|Our results indicate that peer education should be used as a part of undergraduate nursing education on VAW .

To this

Sentences,Tags

In school-age children ,Population/Problem (element P)

what is the effect of a school-based physical activity program,Intervention and Comparison (element I and C)

on a reduction in the incidence of childhood obesity,Outcome (element O)

compared with no intervention,Intervention and Comparison (element I and C)

In high school children,Population/Problem (element P)

what is the effect of a nurse-led presentation on bullying,Intervention and Comparison (element I and C)

on a reduction in reported incidences of bullying,Outcome (element O)

compared with no intervention,Intervention and Comparison (element I and C)

Jul 12-13, 2023

Finally was able to convert and process the whole dataset and started to train BioBert model.

The huge issue I still face is the model training time as we are using 319968 samples for training. Each epoch takes 3.5 hrs to train and the target is to atleast achieve 3 epochs trained model weights.

Due to time constraint I have considered 119968 examples for training. This is taking 1.5 hrs each epoch. The accuracy on custom dataset set has now been improved to 52% for the BIoBert model. There are still many ways in which I can improve model accuracy but the compute resources are a constraint. The notebook keeps timing out on longer runs. Need to think about how to handle these issues.