2025/02/07 CILAB-Seminar

Overall Structural Changes

(Before)

Binary Classification(0/1)

Confusion Matrix (2x2)

Limited Performance measurement

Attention Map (Limited numericalization)



(After)

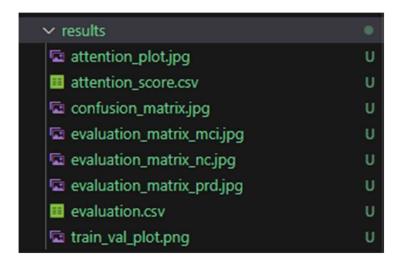
Multi-Class Classification

Confusion Matrix (3x3)

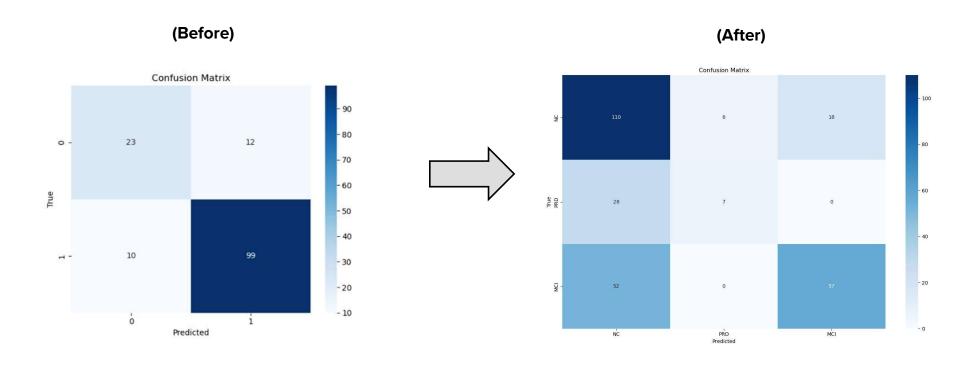
Metrics calculated per class

Attention Map: Includes score and row, column sum

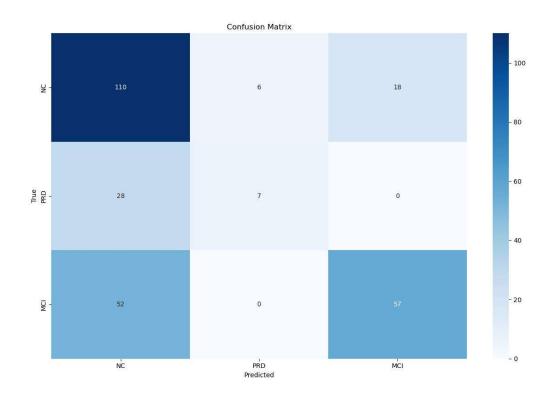
Overall Structural Changes



Binary class to Multi class : Confusion Matrix

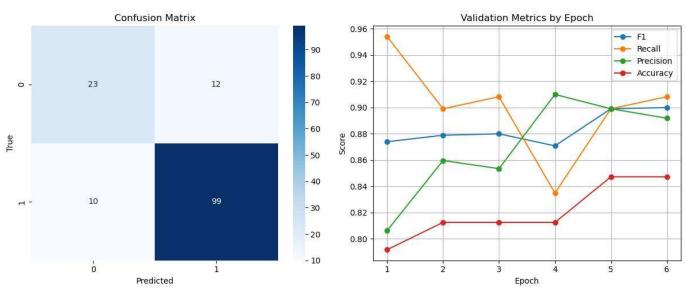


Binary class to Multi class : Confusion Matrix



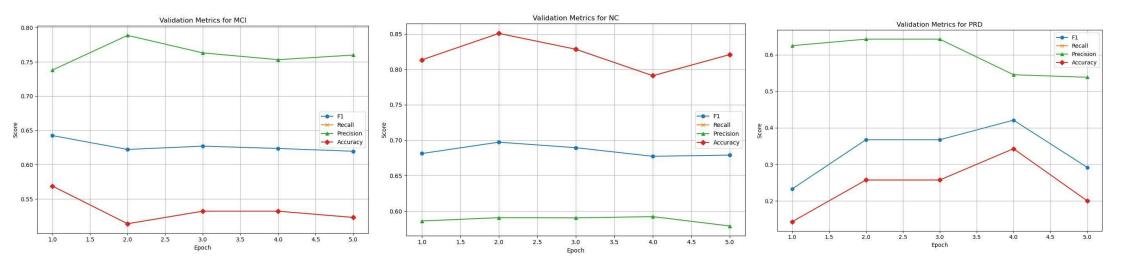
Binary class to Multi class : Evaluation matrix





Binary class to Multi class : Evaluation matrix

(After)

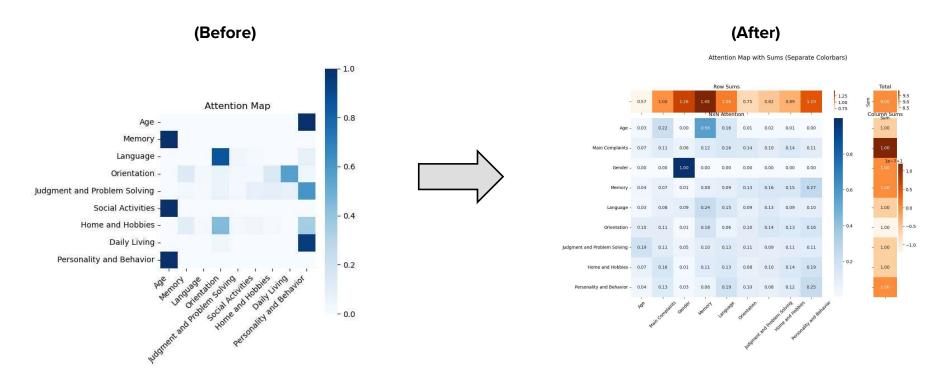


Binary class to Multi class : Evaluation matrix

(After)

```
class,f1,recall,precision,accuracy
NC,0.6790,0.8209,0.5789,0.8209
PRD,0.2917,0.2000,0.5385,0.2000
MCI,0.6196,0.5229,0.7600,0.5229
Overall,0.5301,0.5146,0.6258,0.5146
```

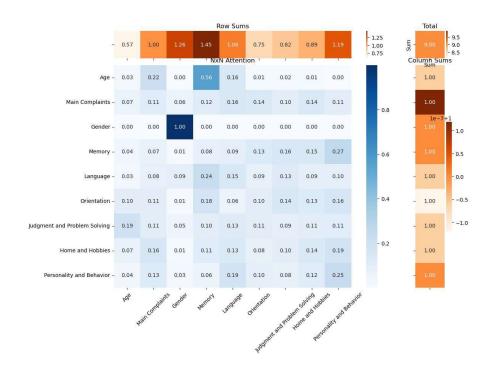
Binary class to Multi class : Attention Heat Map





Binary class to Multi class : Attention Heat Map

Attention Map with Sums (Separate Colorbars)





Fast and Accurate Prediction of Sentence Specificity

Project Downstream **Embedding** Result **Text** LLM Classification **Dictionary Features Hallow Features Polarity Lexicon** Len (Tokens) **MRC** Psycholinguistic Database **Percentage of Symbols Inverse Document Frequency (IDF) Stop word Proportion** , Term Frequency (TF) Number of connections/discussion **Discourse Connectives**

Thank you