

Experiment 2

*Start Date: Nov. 2, 2022

*Report Due Date: Nov. 16, 2022

Notes:

- Each experiment must be done individually. You can search material through Internet but remember to mark it.
- Write an experiment report to describe and analyze the experimental observations.
- You should pack your files including **source code, report, readme file, and other related files** in one .zip/.rar/.7z file.
- Please submit on the Web Learning platform. Do NOT Email or Wechat your report to the instructor or TAs.
- No late report is accepted. No exceptions.
- You can write the report using English or Chinese.

Task:

Learn about how to **detect the fake news** using the BERT model.

Goal:

In this experiment, you are expected to clean the data, analyze the data and design your model.

Data:

Please check the following train and test dataset. You can download it via [this link](#).

Experiment Step:

- Do some EDA (Explore Data Analyze) work to analyze the data. There is an [example](#).
- Build your BERT based classification model using [Transformers](#) package from Hugging Face. You can follow the [demo](#) here but DO NOT copy it directly.
- Try some data augment tricks such as replacing some words with similar words. You can refer to these paper for more method: [AEDA](#) and [EDA](#).
- Try to modify the structure of your model based on the observation of your EDA discussion. Analyze the result and get your conclusion.
- (Optional) You are encouraged to choose a simple model and give a comparative experiment.