# LLMs

## Models we tried to run

### Phi 1.5:

**Too many Limitations, we didn't think it would perform well with the data**

### Mistral 7B

**We need more GPU RAM**

**We tried with 15G GPU RAM and 50G RAM**

### Vicuna 13B

**Needs Open AI API**

### Facebook/Bart

**Bad performance with the data we tested**

## Models Implemented

### Summarization

**flan-t5-base-tldr-news - bart-large-cnn - pegasus-large**

**We measured the accuracy using Rouge and all performed poorly but Bart was the best model**
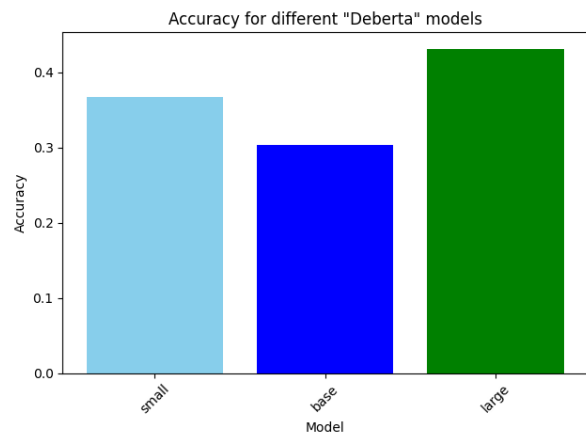
**The summarization took way too much time**

# Topic classification Classification

### Deberta

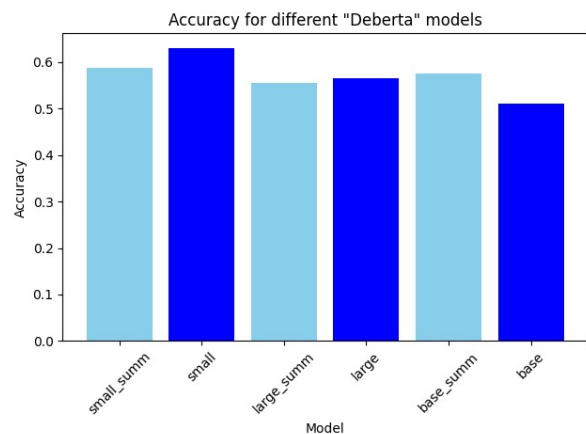**Deberta small 22M had an accuracy of 37%**

**Deberta base 86M had an accuracy of 30%**
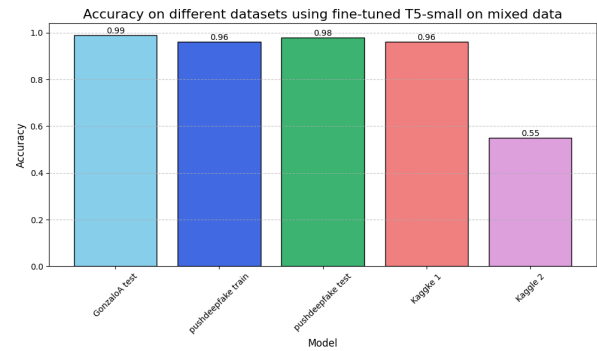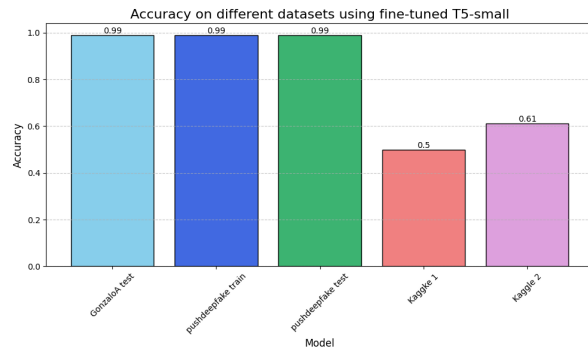
**Deberta large 304M had an accuracy of 43%**



# Fake vs Real classification

**Using Deberta Models with and without Bart summarization**

# t5-small



Accuracy on different datasets using fine-tuned T5-small



Accuracy on different datasets using fine-tuned T5-small on mixed data

**We also tested the last model on a new sample of data outside the datasets we have and had an accuracy of 99%**