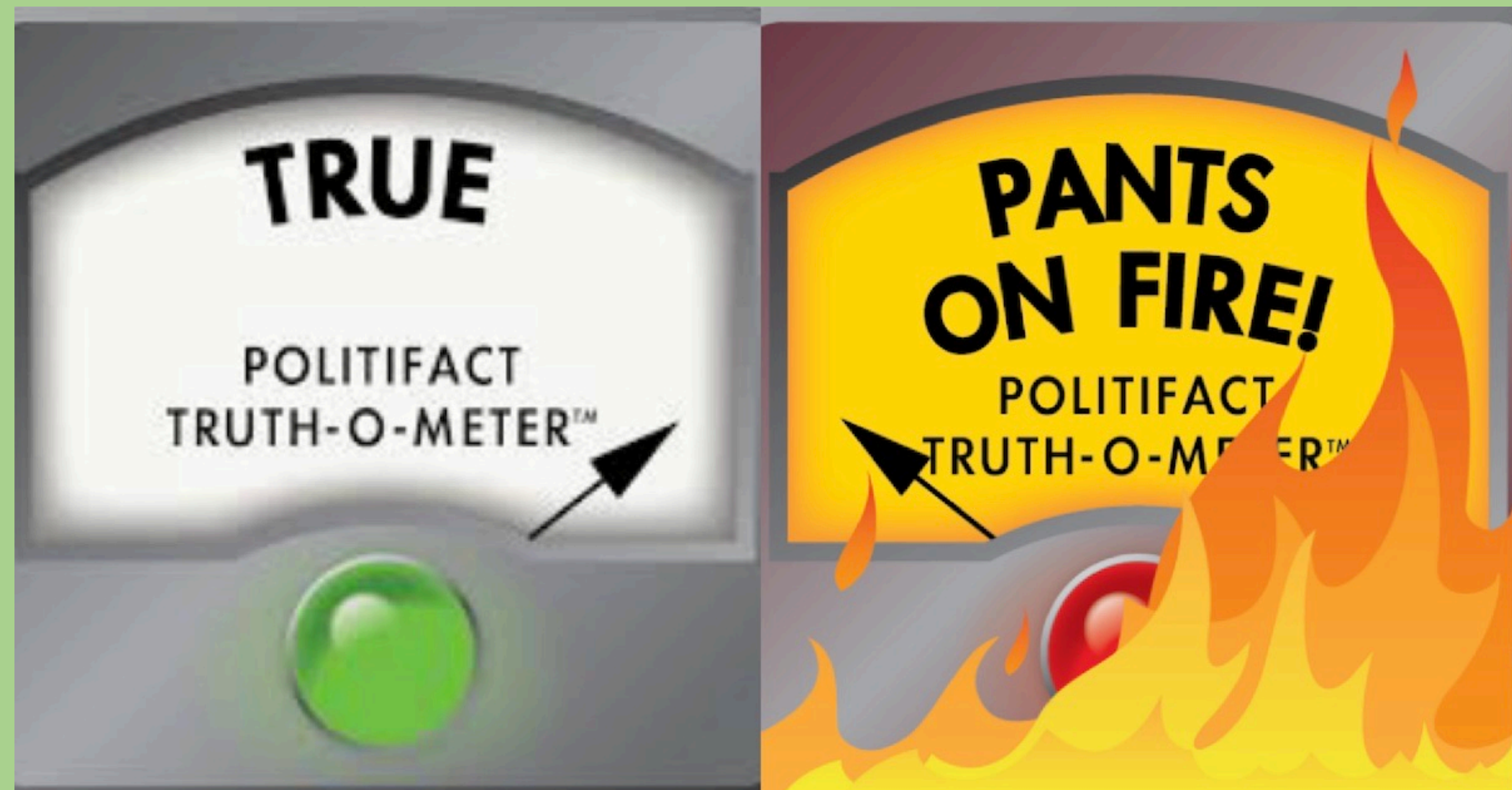


# Fact Checking Task: Do LLM sentence embeddings encode real world knowledge?



## Background

The use of LLMs in NLP is becoming more popular. Recent work suggests that they can store common sense knowledge and factual knowledge gained from pre-trained data. We sought to test this by building a fact checker using a LLM.

PRESENTERS

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## Fact Checking as a Classification Task

Politifact Dataset



## Pipeline

“Williams College is in New York”

LLM Embeddings

Vector of length 768

Classifier

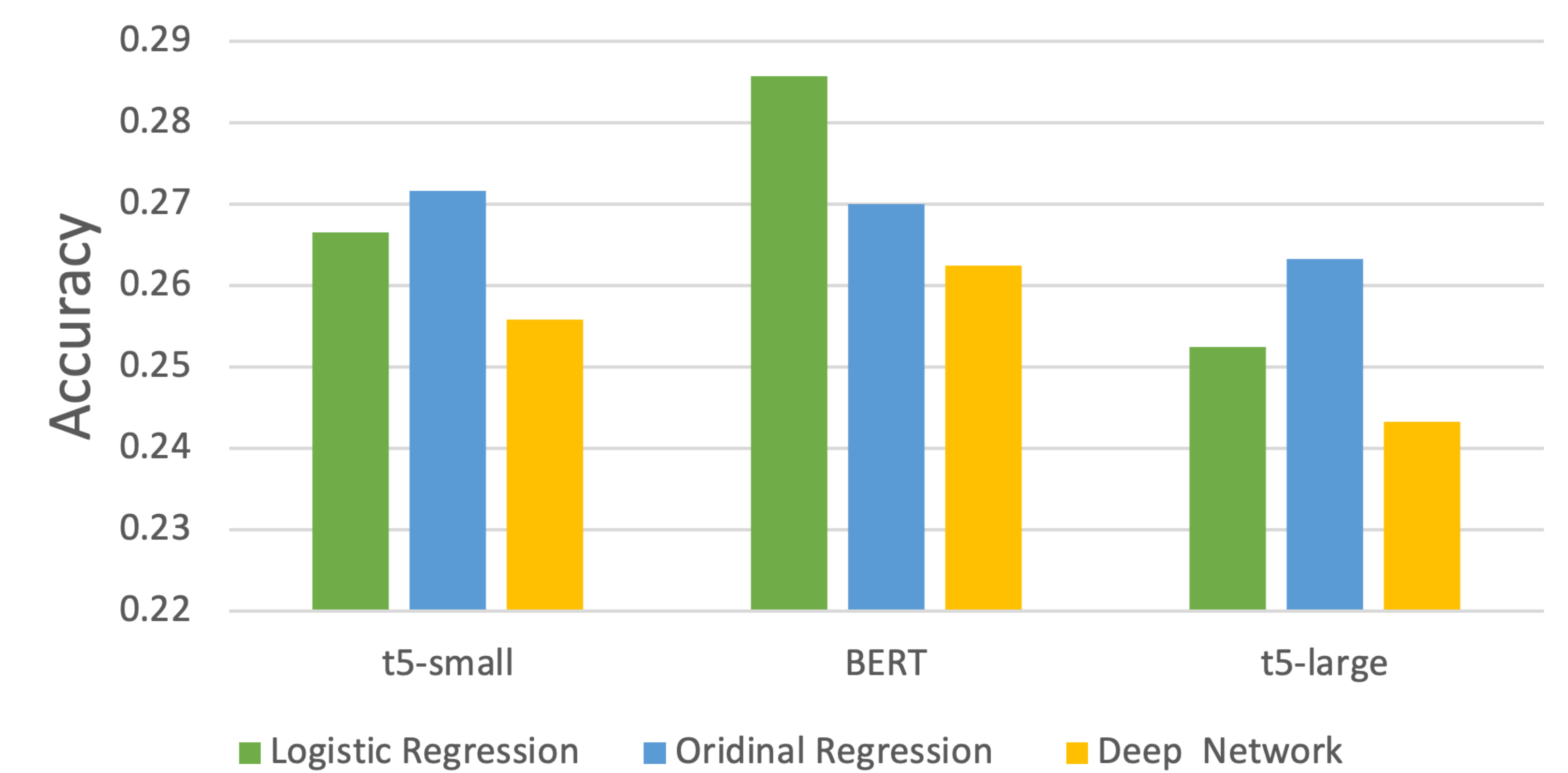
2

Conversion to label

Mostly False

## Accuracy Findings

Accuracies by Language Model



Note: t5-small has 60,506,624 parameters, BERT has 109,482,240 and t5-large has 737,668,096

Accuracies of Each Classification

