

Project Title:
Fake news Classification

Github link:
<https://github.com/amansh45/fnc.git>

Team Members:

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Main Goals of the Project:

Given a news article, the objective of the project is to determine the relevance of the body and its claim. The aim is to build an automatic system that has the capability to identify whether a news article is fake or not. More specifically, given a news article the task is to evaluate the relatedness of the news body towards its headline. The relatedness or stance is the relative perspective of a news article towards a relative claim.

Problem Definition:

Fake news being a potential threat towards journalism and public discourse has created a buzz across the internet. With the recent advent of social media platforms such as Facebook and Twitter, it has become easier to propagate any information to the masses within minutes. While the propagation of information is proportional to growth of social media, there has been an aggravation in the authenticity of these news articles.

The root cause of this problem lies in the fact that none of the social networking sites use any automatic system that can identify the veracity of news flowing across these platforms. A possible reason for this failure is the open domain nature of the problem that adds to the intricacies. Fake News Challenge (FNC-1) is an initiative in this direction.

Results of the project :

Input

A headline and a body text - either from the same news article or from two different articles.

Output

Classify the stance of the body text relative to the claim made in the headline into one of four categories:

- **Agrees:** The body text agrees with the headline.
- **Disagrees:** The body text disagrees with the headline.
- **Discusses:** The body text discusses the same topic as the headline, but does not take a position
- **Unrelated:** The body text discusses a different topic than the headline

So this is the formal definition of our problem statement. The output this obtained tells about the relevance of the news.

Assessing the veracity of a news story is a complex and cumbersome task, even for trained experts. Fortunately, the process can be broken down into steps or stages

As mentioned in the FNC-1, stance detection serve as a useful building block in an AI-assisted fact-checking pipeline. So stage #1 of the **Fake News Challenge (FNC-1)** focuses on the task of Stance Detection. Stance Detection involves estimating the relative perspective (or stance) of two pieces of text relative to a topic, claim or issue. Specifically, the body text may agree, disagree, discuss or be unrelated to the headline.

Timeline:**Phase I: Pre-Requisite Familiarization****18-03-2019 to 21-03-2019**

Analysis of Dataset for Baseline

Study of the Baseline Classifier Provided and its Analysis

Study Hybrid Models of CNN and Tree Based Models

Phase II: Starting with Implementation : 22-03-2019 to 31-03-2019 (*)

Basic Model Flow

Dataset Preprocessing (if any)

Implementation of the Model

Recovering from any pitfalls (if any)

Analyzing the Solution

Re-constructing the model