CS6320: Natural Language Processing

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Projects Spring 2021

Processing Affect In Social Media About the COVID-19 Vaccine

Each Project

+ Will process several forms of affect from Twitter
+ **5 students**

PHASE 1:

+ **ALL students will ANNOTATE in tweets**

+ **The STANCE of the misinformation about the COVID-19 vaccine**

Stance Values: Support, Against, None

Phase # 2

- Each student will develop a neural architecture to process the annotated tweets for the assigned TASK
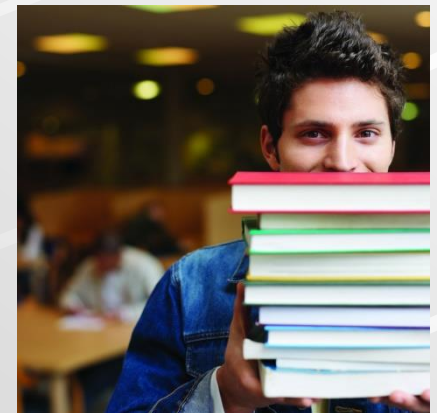
- **Task 1 : <u>Stance detection</u>**

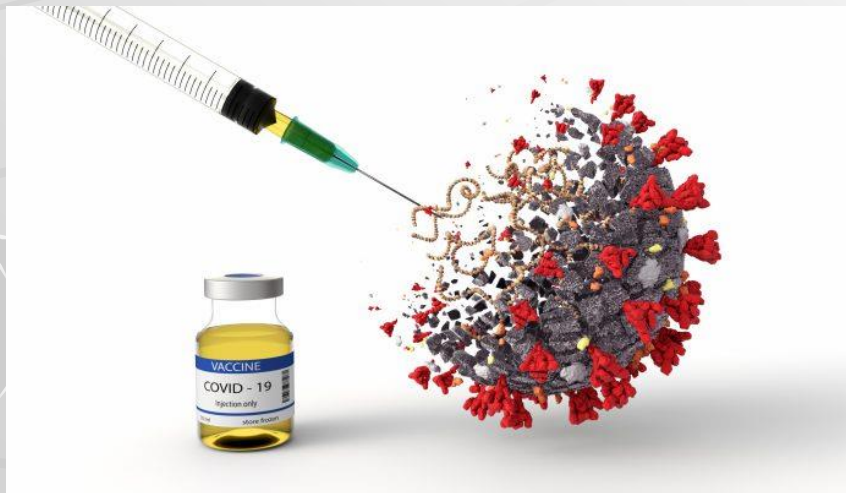 **Should consider several baselines**

  - BERT-based recognition
  ????

  – **Design neural architecture to detect automatically the stance**

1 Student responsible for
Stance Detection

Phase # 2 - continued

STUDENT 2: **Fine-tune sentiment detection and measure its impact on Stance Detection**
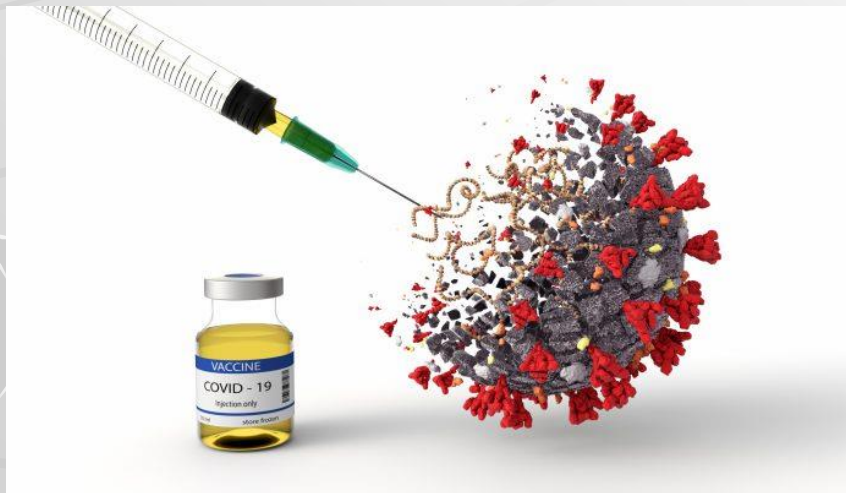

Positive

Neutral

Negative

1 Student responsible for
Sentiment Detection +
Integration in Stance Detection

Phase # 2 - continued

– **STUDENT 3: Fine-tune Emotion detection and measure its impact on Stance Detection**

Surprise

Fear

Joy

....

Student responsible for :
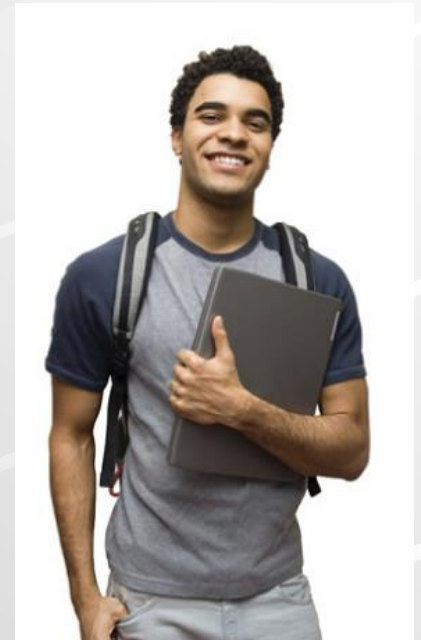*Emotion Detection +*
Integration in Stance Detection

Phase # 2 - continued

- **STUDENT 4: Topic Modeling using Neural Architectures, mapping into hashtags**

1 Student responsible for :

Topic Detection +
Integration in Stance Detection

Phase # 2 - continued

- **STUDENT 5:Connotation detection based on the identification of predicate-argument structures.**
- **Named entity Recognition**

1 Student responsible for :

Connotation Detection + NER Integration in Stance Detection