# Contextual Target-Specific Stance Detection on Twitter: Dataset and Method

### **Paper Information**

• Paper link: https://doi.org/10.1109/ICDM58522.2023.00045

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• Categories: Polarization, Data

#### Addressed Problem

How to detect users' stances toward COVID-19 vaccination on Twitter?

#### Main Contribution

A contextual model that leverages entire Twitter conversations, rather than individual tweets, to infer stances.

## Methodology Comments

The study uses Contextual Multi-Head Attention, which processes both the content of each tweet and the relationships within conversations to improve stance detection.

## General Description

This paper presents a dataset and a method to identify positions (favor, against, or neither) towards Covid vaccination of a twitter post using as context the conversation in which that tweet originated, which increased the F1 evaluation metric by 25 percentage points.

## Significance for the Project

The model and dataset proposed could enhance stance detection in polarized discussions, such as COVID-19 vaccination, providing useful insights for analyzing opinions and identifying polarization in social media.