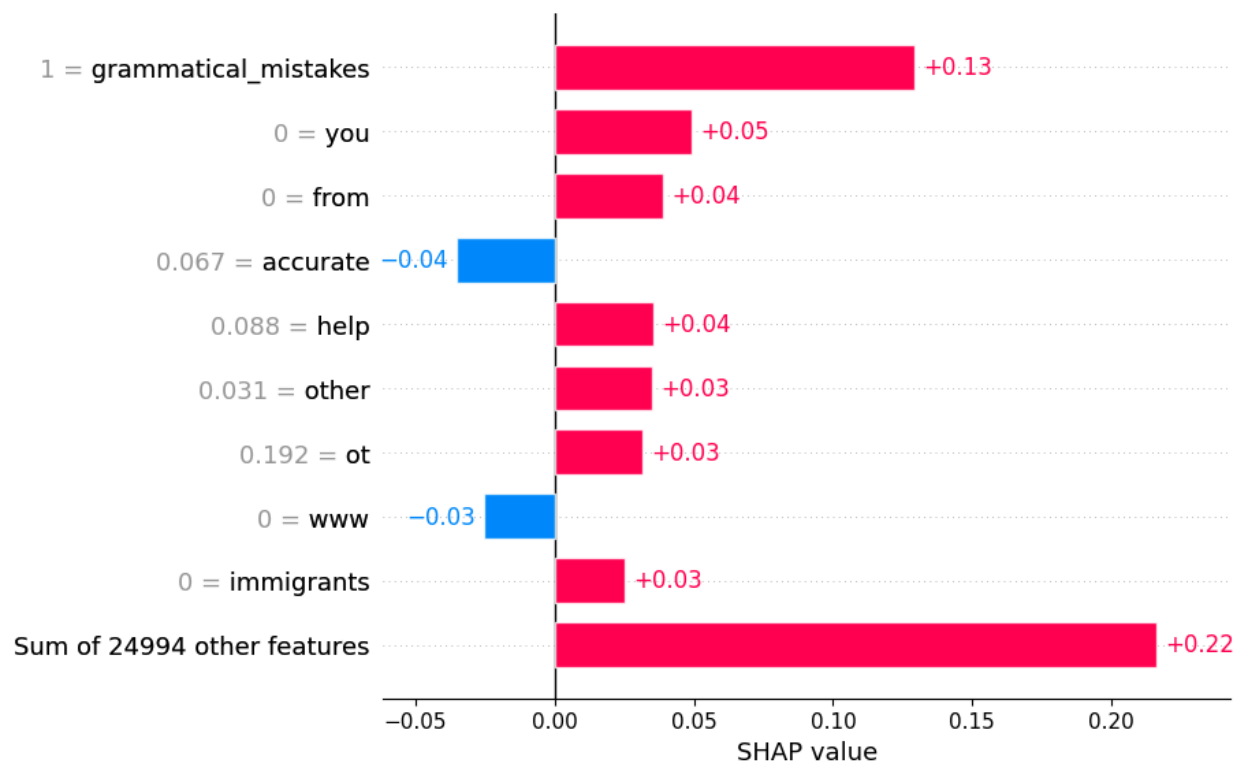


Result of Explainable AI

The XGBoost model, trained on 10,000 samples and tested on 4,000, was analyzed using SHAP values at word, sentence, and paragraph levels. Word-wise, SHAP values highlighted key feature contributions, while sentence-wise analysis explained localized patterns and complexity. Paragraph-wise, features like vocabulary size and grammatical mistakes were evaluated, with SHAP values revealing their broader impact, enhancing model interpretability.

Word wise Result



Sentence wise Result

ON MACHINE TEXT

Predicted Label: 1

Predicted Probability of being AI-generated: 1.0000

Sentence Impact:

Impact: 3.8463 | Sentence: As a vital source of milk, meat, and leather, cows have played a crucial role in sustaining economies and providing nutrition for centuries.

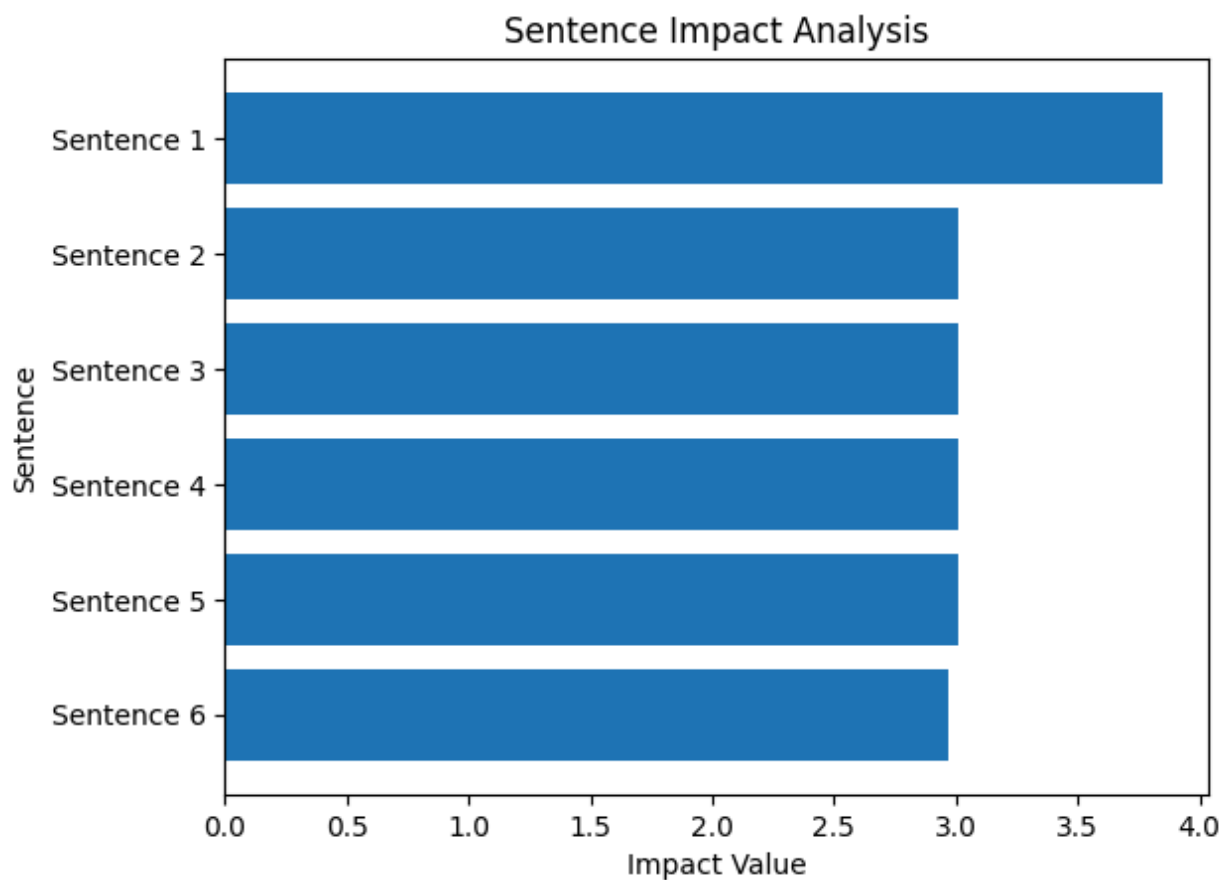
Impact: 3.0073 | Sentence: Their ability to adapt to various environments has made them integral to farming practices worldwide, contributing to food security and rural livelihoods.

Impact: 3.0073 | Sentence: In many cultures, cows hold a sacred status, symbolizing fertility, abundance, and motherhood.

Impact: 3.0061 | Sentence: The cow is a domesticated animal widely known for its significance in agriculture and human society.

Impact: 3.0060 | Sentence: Known for their gentle nature, cows are social animals that form strong bonds within their herds.

Impact: 2.9676 | Sentence: They are ruminants, meaning they have a unique digestive system that allows them to break down tough plant matter, like grass, through a process of fermentation in a specialized stomach.



ON HUMAN TEXT

Predicted Label: 0

Predicted Probability of being AI-generated: 0.0000

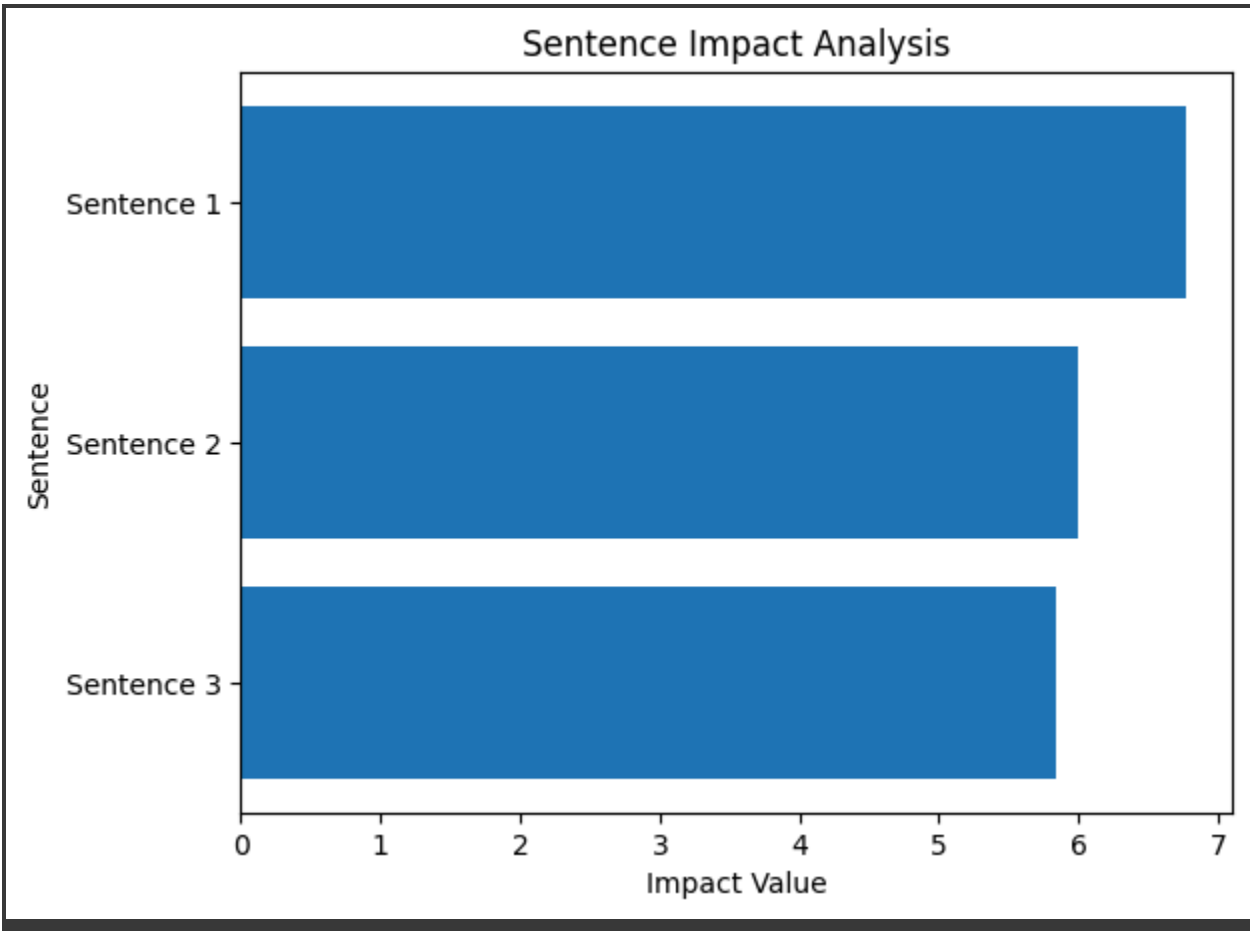
SHAP Explanations:

Sentence Impact Ranking (Most Impactful Sentence First):

Impact: 6.7673 | Sentence: from a particular region or population and was then spread through migration and genetic inter

Impact: 5.9983 | Sentence: the genetics of hair color variation is a complex field of study and there is still much to learn about the factors that influence hair color diversity among.

Impact: 5.8419 | Sentence: different populations one theory is that the gene responsible for hair color variation may have originated.

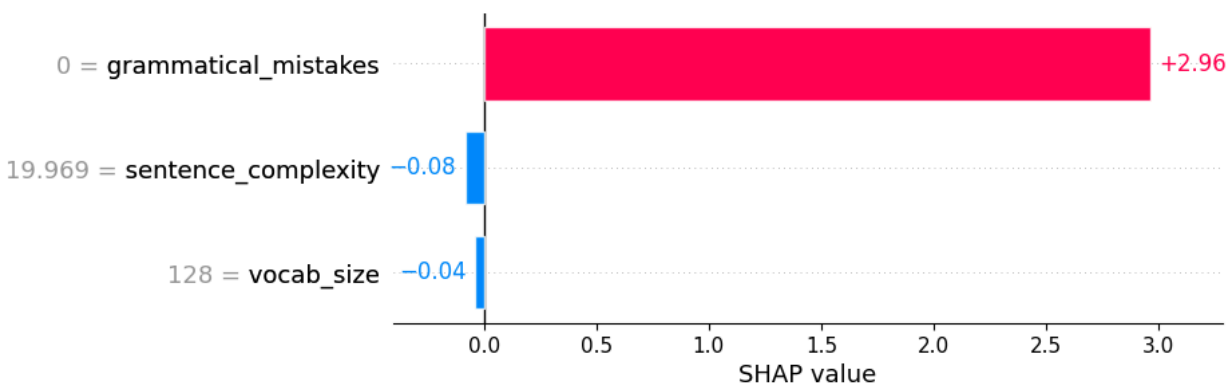


Shap value: paragraph wise

Actual Label: 1

Prediction: 1

Input Text: The World Trade Center catastrophe was a terrible event that occurred on September 11, 2001, when two planes break_apart into the Twin Towers of the World Trade Center in New York City. The towers collapsed, causing the deaths of thousands of people and devastating the city. Some people believe that this event was not just a tragic accident, but rather a conspiracy, or a secret plan made by a group of people to do something harmful or illegal. There are many different theories about who was behind the conspiracy and what their motivations might have been. Some people believe that the U.S. government or other powerful organizations were involved in the attacks in order to further their own goals or agendas. Others believe that the attacks were carried out by terrorists or other groups who wanted to cause harm to the U.S. or to Western civilization more generally. It is important to note that there is no credible evidence to support these conspiracy theories, and the vast majority of experts agree that the attacks were carried out by a group of terrorists affiliated with the Islamic extremist group Al-Qaeda. The U.S. government's investigation into the attacks, known as the 9/11 Commission Report, concluded that the attacks were planned and carried out by Al-Qaeda, and this finding has been widely accepted by the international community.



Actual Label: 0

Prediction: 0

Input Text: Since all life we know requires water , if we went looking for life that did n't require water , we 'd have no idea what to look for . Since water is a prerequisite for Earth - life , it 's a better justification for focusing a search than just trying to search everywhere . > is nt it possible that life could evolve via other mechanisms instead of just DNA , or without needing water ? Possibly . But we have no idea what those mechanism might be , or if such mechanisms even exist , so we have no way of knowing where to look to find such life . Thus it makes sense to focus on the criteria that are necessary for the only type of life we 're aware of , because at least we have some precedent for it . It 's not so much that they are sure , as the fact that water is a straight up amazing molecule and it 's perfect for pretty much everything that you would need for life . On top of that it 's composed of some of the most common elements in the universe , in fact

, if you look at the list of elements that compose life on earth , you 'd find that they are also at the top of the list of the most abundant particles in the universe .

