

D. Karamouzas, E. Tsoni, P.Giannouris, I. Pitas, “Natural Language processing for political text analysis”

Abstract: Natural Language Processing (NLP) is a subfield of artificial intelligence and computational linguistics with the goal of “understanding” human language. Although its roots can be traced back to the 1950’s, the combination of increased computational power, novel deep learning algorithms and the availability of big corpora has brought about a revolution in the field. Large transformer models (e.g. BERT, GPT-3, PEGASUS) have managed to achieve near human performance in a plethora of tasks, allowing us to analyze the vast unstructured language data without fatigue in a consistent and unbiased way. Specifically, NLP can play a determining factor in politics, aiding in tasks such as opinion and argument mining, emotion detection, summarization or even popularity prediction.